



# 2001

# Lagging Behind

A REPORT CARD ON  
EDUCATION IN LATIN AMERICA



Partnership for Educational  
Revitalization in the Americas

**A Report of the Task  
Force on Education,  
Equity, and Economic  
Competitiveness in  
the Americas**





# LAGGING BEHIND

A Report Card  
on Education  
in Latin America

November 2001

The Task Force on Education, Equity, and Economic  
Competitiveness in Latin America & the Caribbean



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## MEMBERS OF THE TASK FORCE

**José Octavio Bordón\***, co-Chair  
Argentina

**John Petty\***, co-Chair  
United States

**Patricio Aylwin**  
Chile

**Roberto Baquerizo\***  
Ecuador

**Nancy Birdsall\***  
United States

**Margaret Catley-Carlson\***  
Canada

**Juan E. Cintrón\***  
Mexico

**Jonathan Coles Ward\***  
Venezuela

**José María Dagnino Pastore\***  
Argentina

**Nancy Englander\***  
United States

**Peter Hakim\***  
United States

**Ivan Head\***  
Canada

**Rudolf Hommes\***  
Colombia

**Enrique Iglesias\***  
Uruguay

**Emerson Kapaz\***  
Brazil

**Jacqueline Malagón\***  
Dominican Republic

**José Mindlin**  
Brazil

**Roberto Murray Meza\***  
El Salvador

**José Angel Pescador\***  
Mexico

**Manuel Fernando Sotomayor\***  
Peru

**Osvaldo Sunkel\***  
Chile

**Juan Carlos Tedesco\***  
Argentina

**Celina Vargas do Amaral Peixoto\***  
Brazil

**Alexandra Vela**  
Ecuador

*\* Signers of the report*

## MISSION

The Task Force on Education, Equity, and Economic Competitiveness in Latin America and the Caribbean is an independent non-governmental commission composed of distinguished citizens from throughout the region who are concerned about school quality. The Task Force was established in 1996 by the Inter-American Dialogue and the Corporation for Development Research (CINDE) as part of the Partnership for Educational Revitalization in the Americas (PREAL). Its members include leaders in the fields of industry and commerce, government, higher education, law, religion, and the media.

In April of 1998, the Task Force issued its first report, *The Future at Stake*. The report outlined grave deficiencies in the education being offered to children throughout Latin America and the Caribbean and made four recommendations for improvement. It was published in English, Spanish, and Portuguese and was distributed to over 15,000 leaders in government, business, politics, and the media.

As a follow-up, we decided to publish a periodic report on education progress—a “report card” on education in the region—so that leaders outside the education sector would have independent, reliable information on how their schools are doing.

Education report cards are one tool for increasing accountability and drawing attention to results. They are relatively common in the United States and Europe but are relatively rare in Latin America. Report cards monitor changes in key indicators of education performance, including student learning (through standardized test scores), enrollments, graduation rates, government spending, student/teacher ratios, and teacher qualifications. They show at a glance how a particular school, municipality, province, or country is performing in comparison to others with respect to different education indicators. By grading or ranking that performance in the same way that children are graded in schools, parents, policy makers, and the general public can quickly identify both where performance is exemplary and where improvement is needed. Most importantly, these report cards provide those who use schools—parents, employers, and others—with key information on how their schools are doing in a simple and easy-to-understand format.

This is the first report card on education in Latin America. It offers the best information available on aspects of education—access, quality, and equity—that are crucial to improving learning. It is based on the conviction that

transparency is essential to good education and that parents, students, and employers have a right to know how schools are organized, how much they cost, and what they produce.

Our emphasis is on publicizing outcomes rather than assigning blame. Shortcomings in education have many causes. Deficiencies in management, teacher training, and funding are only part of the problem. Poverty and inequality, which are widespread in most countries, make the work of schools much more difficult. But our concern is with documenting results. Social justice and international competitiveness demand that each country understand clearly how its students measure up.

The report is necessarily a work in progress. Appropriate data for many countries is unavailable, incomparable, or of poor quality. Country aggregates sometimes mask large internal disparities. Countries also differ greatly across the region. Some clearly do better than others, and none of our characterizations fits every country perfectly. Nonetheless, the information that is available tells a compelling tale, both of progress made and challenges remaining. While our recommendations will have different priority in different countries—in response to national circumstances—each plays a key role in addressing education deficits common to all countries in the hemisphere.

As with *The Future at Stake*, this report reflects the consensus of the members of PREAL’s Task Force on Education, Equity, and Economic Competitiveness. Not every member agrees fully with every phrase in the text, but—except as noted in individual statements—each of the signers endorses the report’s overall content and tone and supports its principal recommendations. All subscribe as individuals; institutional affiliations are for purposes of identification only. We hope that the contents of this document stimulate dialogue on problems, progress, and alternative approaches to education reform and make a solid contribution to improving education progress.

**José Octavio Bordón**, Task Force co-Chair  
**John Petty**, Task Force co-Chair

## ACKNOWLEDGMENTS

The preparation of this report was a combined effort by PREAL staff at the Corporation for Development Research (CINDE) in Santiago, Chile and the Inter-American Dialogue in Washington, D.C. Many people contributed to the process. Tamara Ortega Goodspeed, in particular, played a key role in the report's design, research, analysis, and production. Antonio Sancho worked extensively on finance data and analysis. A group of external advisors, including José Joaquín Brunner, Ernesto Ottone, Simon Schwartzman, and Juan Carlos Tedesco, provided valuable advice during initial planning for the document. Patricia Arregui, Marcela Gajardo, and Jeffrey Puryear supplied important editorial comment on each draft.

We also thank PREAL staff members Francesca Bosco, DeAnna Green, Nelson Martínez, and Gabriel Sánchez Zinny for their logistical support, work on draft preparations, and general management. UNESCO-OREALC, the World Bank, and the Inter-American Development Bank contributed valuable analysis as well as access to data.

Many people at other institutions and offices were also instrumental. Lenore Garcia and Marianne Lemke at the U.S. Department of Education-International Affairs kept us abreast of developments and issues related to report cards in the United States. Maritza Blajtrach and Paulo Garchet provided translations in Spanish and Portuguese. Karin Shipman at Studio Grafik helped immensely with design and publication details.

This report would not have been possible without the support of the U.S. Agency for International Development, the Inter-American Development Bank, the Avina Foundation, the GE Fund, and the Tinker Foundation. They have demonstrated a sustained commitment to education reform in Latin America. Their support for PREAL has been crucial in developing the informational and institutional networks necessary for bringing the project to fruition.

Finally, we especially want to express our gratitude to Patricio Cariola S.J., who made a major contribution to education in Latin America throughout a long career and was a dedicated member of the Task Force until his death in June 2001.



## A REPORT CARD ON LATIN AMERICAN EDUCATION

In 1998, we argued that four core problems—(1) a failure to set standards for student learning and to evaluate performance; (2) the absence of authority and accountability at the school level; (3) poor teaching; and (4) insufficient investment in primary and secondary education—lie at the root of Latin America’s quantity, quality, and equity gaps.

Our review of efforts over the past three years suggests that only limited progress has been made to remedy these problems. While many countries have expressed a strong commitment to improving education and have undertaken reforms to make schools better, results have been slow in coming.

Since improvement depends, in part, on holding education providers accountable for their management of the education sector, we offer the following appraisal of education progress on a scale of “A” (excellent) to “F” (very poor). These grades, while necessarily subjective, reflect our best assessment of the state of key education indicators and practices based on the available evidence. We also include arrows to indicate where progress is being made, even when the end result is disappointing. We used a “one country-one vote” approach, believing that the need to ensure quality education for all students is equally great in large and small nations, even when larger countries have better education indicators.

### Report Card on Latin American Education

Subject	Grade	Progress	Comments
Test Scores	D	↔	Scores on national and international exams are alarmingly low.
Enrollments	B	↑	Average levels of education remain below world patterns, despite high primary enrollments and a dramatic increase in pre-primary coverage.
Staying in School	C	↔	In many countries, between a quarter to half of all students never make it to the fifth grade. Even fewer graduate from high school.
Equity	F	↔	Quality education seldom reaches poor, rural, or indigenous children.
Standards	D	↔	Comprehensive national standards have not been established and implemented.
Assessment	C	↑	National testing systems are in place but are weak and under-utilized.
Authority & Accountability at the School Level	C	↑	Decentralization is under way, but seldom extends all the way to schools.
Teaching Profession	D	↔	Teachers are poorly trained, poorly managed, and poorly paid. Superior teaching is seldom recognized, supported, or rewarded.
Investment in Primary and Secondary Education	C	↑	Spending (as % GNP) has increased, but public investment per pupil is low and is concentrated in higher education.
Grading Scale:	A B C D F	Excellent Good Average Poor Very Poor	↑ Improving ↔ No Change ↓ Declining

## I. LATIN AMERICA LAGS BEHIND

In 1998 we published a report that outlined grave deficiencies in the education being offered to children throughout Latin America. We argued that Latin America's schools were holding back the region and its people by reinforcing poverty, inequality, and poor economic performance. We pointed out that these problems were concentrated in public schools, which overwhelmingly serve the children of poor families. We argued that Latin America's future would be bleak until all children were provided with real opportunities for a decent education. To address these problems, we called on all countries to take four key steps:

- Set standards for the education system and measure progress toward meeting them;
- Give schools and local communities more control over and responsibility for education;
- Strengthen the teaching profession by raising salaries, reforming training, and making teachers more accountable to the communities they serve; and
- Invest more money per student in pre-school, primary, and secondary education.

Thus far, we can report only limited progress, despite countries' efforts to improve education through a variety of reforms (Table 1). The region's major—and very significant—achievement during the past three decades has been the expansion of enrollments chiefly at the pre-school and primary levels. However, quality remains low, inequality remains high, and few schools are accountable to the parents and communities they serve. The result is that, at a time when human resources increasingly constitute the comparative advantage of nations, Latin America is lagging behind.

Indicators of the region's educational shortcomings are clear:

### Test scores remain low: D

National and international comparisons suggest that student learning is deficient.

- **Scores on national student achievement tests are disappointing.** Argentine students could answer correctly only 50% of test questions based on minimum competency levels. In El Salvador, scores on national achievement tests averaged 45% in mathematics and 48% for

language—well below expectations. Exams in Costa Rica, Brazil, and Colombia also show student learning to be much lower than target levels. And students in Costa Rica and Mexico often score lower as they advance through the system. (For more information on national assessments, see Table A.11 in Appendix.)

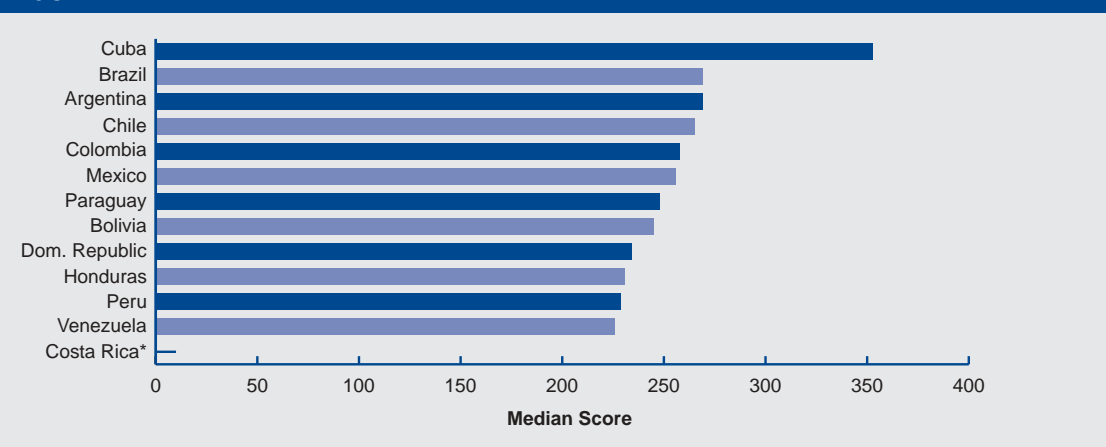
- **Most Latin American countries still do not participate regularly in global achievement tests, making comparisons with other regions difficult.** Chile alone agreed to participate in the 1999 version of the Third International Mathematics and Science Study (TIMSS-R). It finished 35th out of 38 countries—well below the international average and considerably behind Asian competitors, including Malaysia and Thailand. Only two countries from Latin America chose to participate in the same worldwide test in 1996. One of them—Colombia—ranked 40th out of the 41 countries surveyed, below every participating Asian, Eastern European, and Middle Eastern country. The other—Mexico—refused to make its scores public. Brazil and Mexico are the only two countries currently participating in the OECD's Program for International Student Assessment (PISA). And although a few additional countries have said they will participate in future international tests, such as the International Education Association's civics study and Progress in International Reading Literacy Study (PIRLS), most Latin American countries do not regularly participate.
- **Only one region-wide achievement test has been administered.** This test—developed by UNESCO's Latin American office in 1998—was not made comparable to the TIMSS or any other global exam. In terms of results, Cuba far and away led the region in third and fourth grade mathematics and language achievement (Figure 1). Even the lowest fourth of Cuban students performed above the regional average. Only the highest scoring students from other Latin American countries matched the achievement of students in the lowest two quartiles in Cuba—a difference typically found between rich and poor countries. Meanwhile, Chile and Colombia—which have scored poorly on worldwide tests—got average scores on the regional test, suggesting that most Latin American countries

## Fourth Grade Mathematics Achievement, 1998

\*Participated, but results not released.

Source: Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación, 1998 and 2000.

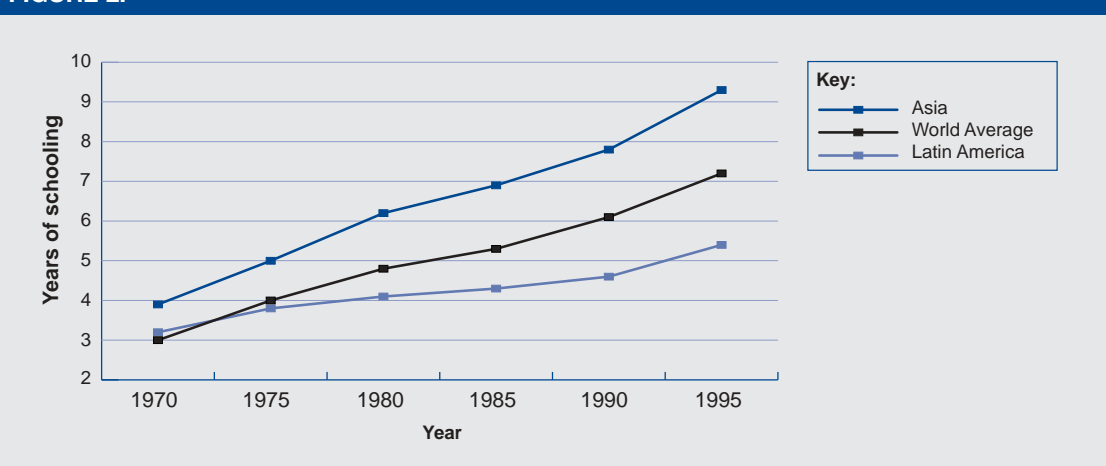
FIGURE 1:



## Average Years of Schooling among Workforce, 1970-1995

Source: Lodoño and Székely, 1997, in *Pathways to Growth: Comparing East Asia to Latin America*, 1997.

FIGURE 2:



would do poorly on worldwide tests as well. Two countries—Costa Rica and Peru—initially refused to release their results from the UNESCO test. However, Peru has recently made its scores public, and they are included here.

### Levels of education are low: B

Enrollments at all levels are increasing in the region. However, most countries still have not reached 100% net enrollment at the primary level, and seven countries remain below 90%. Only four countries have enrollments above 50% at the secondary level, far below the 75% target for 2010 set by the region's heads of state at the 1998 Summit of the Americas in Santiago. In many countries, a third or less of secondary school-aged children are enrolled in school (see **Table A.2** in Appendix).

Despite concentrated efforts by governments to provide universal access to education, workers in Latin America have less education than their counterparts in Asia and the Middle East, and the gap is widening. Latin America's workforce averages less than six years of schooling, two years below world patterns and what the region's own level of development would predict (**Figure 2**). In most of the region, a third or less of the urban workforce has completed the 12 years of schooling necessary to guarantee a decent standard of living and keep pace with the needs of the global economy. In rural areas, schooling levels are considerably lower (see **Table A.4** in Appendix). Worse, the average schooling of the workforce rose by less than 1% annually during the 1990s, compared with sustained annual rates of some 3% over three decades for the four Asian Tigers (Korea, Taiwan, Singapore, and Hong Kong). With such

## Fourth Grade Completion, 1998

\*Peru data for 1993 cohort, personal communication with chief of statistical unit, Peruvian Ministry of Education, 2001.

Source: UNESCO, *World Education Report, 1998*

different rates of improvement, Latin America is fast falling behind its competitors. This trend will not change unless governments are able to muster the political will and public support for more extensive and sustained reforms.

### Few students stay in school: C

- **Primary completion rates are low.** In many countries, one-fourth to nearly one-half of the children who enter primary school fail to make it to the fifth grade (**Figure 3**). By contrast, nearly all students who enter primary school in Egypt, China, and the East Asian Tigers reach grade five. In Latin America, only Cuba, Uruguay, and Chile have comparable completion rates. In Zambia—a relatively poor country—a higher percentage of students reach fifth grade than in most Latin American countries. In the Dominican Republic, El Salvador, and Colombia, a quarter or more of children who enroll in the first grade fail even to make it to the second grade.

- **Even fewer students finish secondary school.**

In 1998, only around half of Chilean students and only 30% of Mexican students enrolled in high school actually graduated (**Figure 4**). Argentina and Brazil did not fare much better with little more than a third of their students completing high school—less than in Thailand, Malaysia, and the Philippines. Moreover, Chile, Mexico, Argentina, and Brazil are among the larger, more developed countries in Latin America; one can only assume that the situation is worse elsewhere in the region.

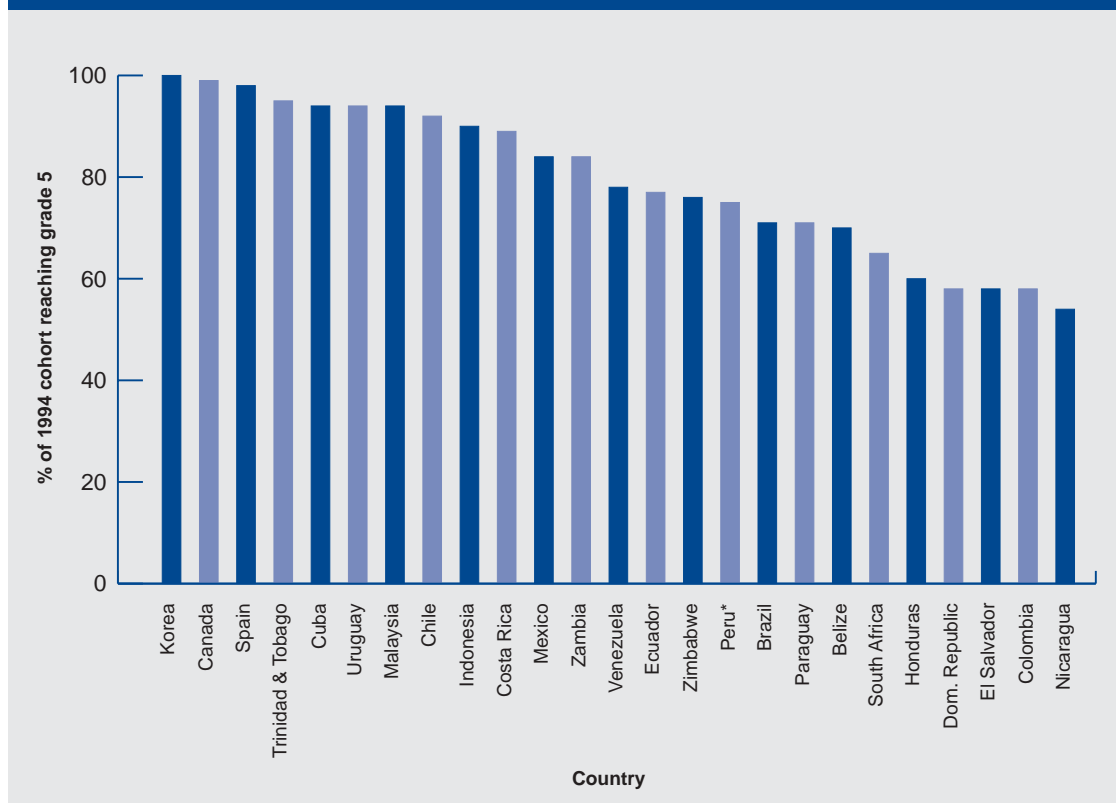
### Inequalities plague education systems: F

Instead of reducing income inequality, education in many countries may be exacerbating the situation.

- **The wealthiest 10% of 25-year-olds have 5 to 8 more years of schooling than the poorest 30%.**

The gaps are even higher in Mexico, Panama, and El Salvador—where they exceed eight years

FIGURE 3:

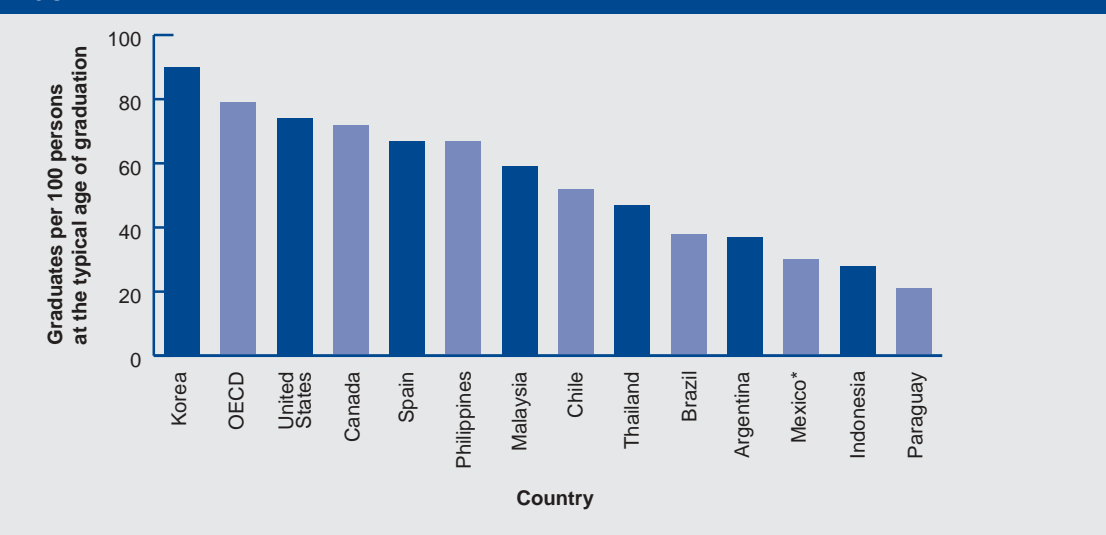


## Secondary School Graduation Rates, 1998

\* Gross graduation rate may include some double counting.

Source: OECD, *Education at a Glance, 2000*

FIGURE 4:



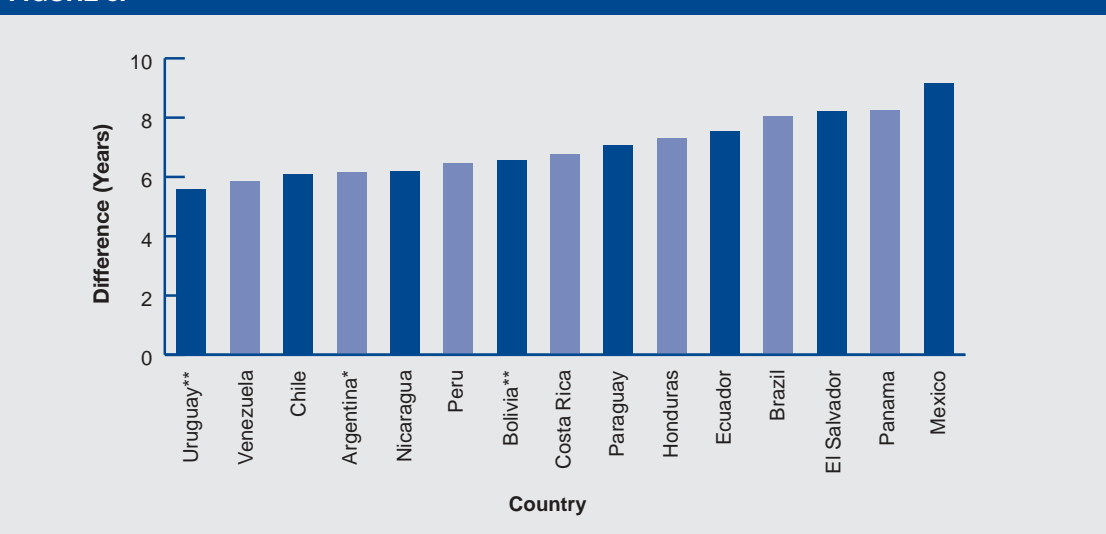
## Difference in Average Years of Schooling between Wealthiest and Poorest 25-Year-Olds, 1994 - 1996

\*Includes only Greater Buenos Aires

\*\*Includes only urban areas

Source: IDB, *Economic and Social Progress, 1998-99*

FIGURE 5:



(Figure 5). The figures for Argentina, Bolivia, and Uruguay leave out the rural population, which is usually the most deprived sector.

- **In almost every country for which data are available, living in rural areas compounds education inequalities.** The rural poor are least likely to be enrolled in school at any level. They are dramatically disadvantaged at the secondary level, where enrollment rates in most countries are nearly 30% lower than those of the urban non-poor. In Nicaragua, the difference exceeds 50% (see **Figure A.1** in Appendix).

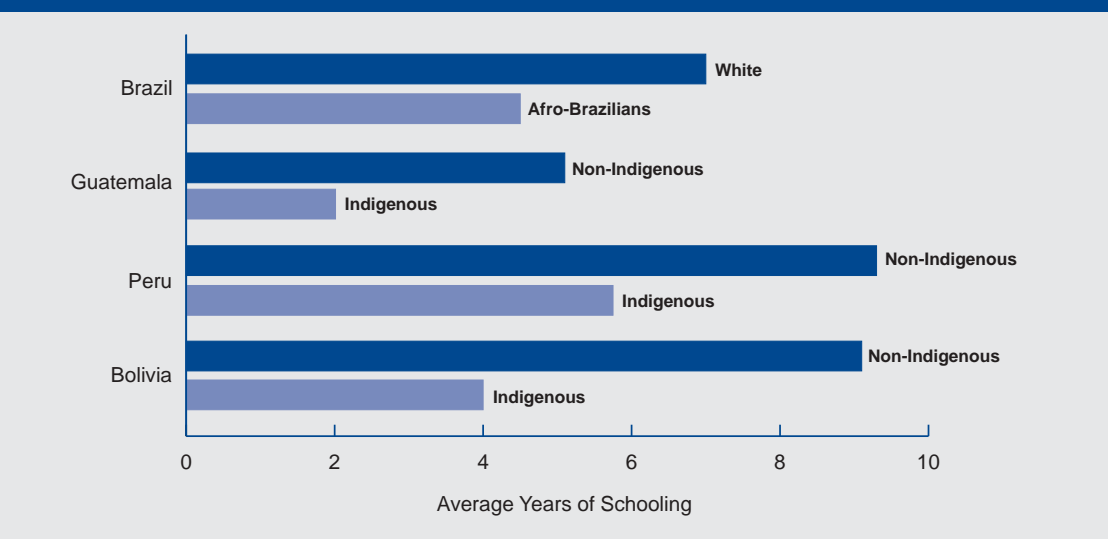
- **Inequalities in student achievement mirror those in access to quality education.** Poor and rural students tend to score lower on achievement tests. In Chile, for example, children from lower income groups score nearly 20 points lower in Spanish than do children from upper income families. The UNESCO test of third- and fourth-graders in 13 Latin American countries found that, with few exceptions, rural students scored lower in mathematics and language than did their urban counterparts (see **Table A.10** in Appendix).

## Average Years of Education among Adults (ages 25-60) by Ethnic Group

Most recent year 1997-1999.

Source: IDB, *Measuring Social Exclusion: Results from Four Countries*, 2001.

FIGURE 6:



- Certain ethnic and racial groups are particularly disadvantaged.** Limited available information from Peru, Guatemala, Brazil, and Bolivia shows that working-age adults from indigenous and African backgrounds have at least three fewer years of education than their white counterparts (Figure 6). This is particularly problematic in countries like Guatemala and Bolivia where indigenous groups comprise a large portion of the population. Differences start as early as the first two years of schooling, particularly in Bolivia and Guatemala, where school attendance among indigenous children is nearly 10-15% below that of their non-indigenous peers (see Figure A.2 in Appendix). In Brazil, the only country with data available for comparisons over time, the difference in attendance rates between white and non-white children in the first two grades has been shrinking since 1992. However, repetition and dropout rates among older Afro-Brazilian children remain high.

There is, however, a decided gender bias in staffing the schools of most Latin American countries. Women predominate among the teaching ranks at the primary level and yet are in the minority among university professors. And men are far more likely than women to be principals in public primary and secondary schools.

- With respect to gender equity, Latin America is doing relatively well.** Boys and girls are each as likely to attend and complete schooling at all levels, and the gender bias in some countries actually tips away from boys in favor of girls (see Tables A.20-25 in Appendix). The notable exception is in countries with substantial indigenous populations, such as Bolivia and Guatemala, where indigenous girls continue to get less education and are more likely to drop out than boys.

- Public spending discrepancies reinforce inequality by concentrating disproportionately on higher education.** Despite the poor coverage and quality of primary and secondary education, substantial resources are allocated to higher education instead. Since higher education serves primarily the middle and upper sectors of the population, this pattern of spending significantly discriminates against the poor, who rarely make it as far as the university level.

## II. REFORMS FALL SHORT

Most governments recognize the need for reform and have begun to address the quality, quantity, and equity gaps in education. At the 1994 Summit of the Americas in Miami, the heads of state agreed to pursue three education goals over a 15-year period. They reaffirmed their commitments at subsequent summits in Santiago in 1998 and in Quebec City in 2001. Individually, all governments have embarked on reforms of some kind, often with support from business and civil society leaders. (Table 1)

Nonetheless, education remains in crisis. Progress toward the four recommendations made by the Task Force three years ago has been generally disappointing, as is demonstrated in the following recommendation-by-recommendation analysis.

**TABLE 1: Education Reforms in Latin America and the Caribbean**

	Argentina	Bolivia	Brazil	Colombia	Chile	Dominican Republic	Costa Rica	El Salvador	Guatemala	Mexico	Nicaragua	Panama	Paraguay	Peru	Uruguay
<b>Institutional Reorganization &amp; Decentralization of Management</b>	X		X	X	X	X		X		X					
<b>Strengthening School Autonomy (curricular, pedagogical, financial)</b>		X	X*		X			X	X		X		X		
<b>Improvements in Quality and Equity: Focused Programs to Provide Materials, Equipment, Better Infrastructure</b>	X	X	X	X	X	X	X		X				X	X	X
<b>Curricular Reform</b>	X		X		X	X	X			X					X
<b>Extension of the School Day</b>				X	X										X
<b>Professionalization of Teaching and Teacher Training</b>	X		X	X	X	X	X		X		X				X
<b>Increase in Education Investment (Base Year 1996)</b>	X	X	X	X	X		X		X	X		X	X		X

Source: Gajardo, PREAL *Working Paper* #15, 1999.

\*(States in Brazil)

## 1. SET STANDARDS FOR EDUCATION SYSTEMS AND MEASURE PROGRESS TOWARD MEETING THEM

### Standards: D

To date, no country in the hemisphere has established, disseminated, and implemented comprehensive national standards in education, which leaves countries without a clear sense of where they are, where they want to go, and how far they are from getting there.

Most countries have a national curriculum, and several (including Brazil, Argentina, Chile, Uruguay, Costa Rica, Dominican Republic, and Mexico) have sought to make performance indicators clearer and more measurable. Recently reformed curricula are much better than the old-fashioned lists of facts and information they have replaced. However, neither the “intended” nor the “implemented” curricula in Latin America appear to contain high standards of academic excellence comparable to those that are being explicitly pursued in other regions of the world.

Furthermore, reforming curricula must not be confused with setting standards. A system of standards should include:

- **Content standards** that define what children should know and should be able to do at each grade level from primary to upper secondary;
- **Performance standards** that describe what kind of performance represents inadequate, acceptable, and outstanding accomplishment; and
- **Opportunity-to-learn, or school delivery, standards** that define the availability of programs, staff, and other resources that schools and governments should provide to enable their students to meet challenging content and performance standards.

At a minimum, standards should be established in four academic areas: math, language, science, and social studies. They should be clear, demanding, and consistent statements that are understood by everyone—not by education specialists alone. They should also be linked to curriculum, texts, teaching materials, teacher training, and the design and use of tests.

### BOX 1 - Setting Standards in Central America

The Coordinación Educativa y Cultural Centroamericana (Central American Education and Cultural Committee - CECC), in conjunction with the Organization of Ibero-American States (OEI), is spearheading a project to establish common content and performance standards in mathematics, Spanish, and natural sciences at the primary school level in Central America. CECC, which represents the Central American ministries of education, seeks to:

- Strengthen and review curricular reform projects that are being carried out in each participating country;
- Raise awareness that clear goals and objectives are necessary to achieve quality education;
- Establish a baseline for measuring academic achievement; and
- Define an ideal of quality for primary education in Central America.

Regional and national standards have now been drafted and are being distributed for review and discussion at the national level. Details are available at the OEI Website ([www.oei.es](http://www.oei.es)).

Note: PREAL’s working group on standards and evaluation actively supports this project. Members serve as leaders and primary and short term consultants for the project.

Source: PREAL Informa, October 1999.



## BOX 2 - Building Support For Standards in the United States

The United States began work on standards in the 1980's. Forty-nine states, the District of Colombia, and Puerto Rico have all established, or are in the process of establishing, common academic standards for students at the state level. Forty-seven states either have already developed or are developing assessments to measure student performance. Thirty-six states publish annual report cards on individual schools. These standards and assessments, however, are of variable quality and may not be comparable across states, which raises questions about how to guarantee that all students are exposed to and held responsible for the same high quality of education.\*

Several agencies have drawn up promising models for national standards in core curriculum areas (e.g. math and science) and work on teacher standards is under way. Political support for standards is high—from the general public to the Presidency, and yet the United States still has not adopted a system of national standards.

In part, this stems from a tradition of local control of schools and mistrust of federal interference in education. National standards challenge local decision-making authority and threaten to limit schools' flexibility in addressing particular local concerns. Critics worry that the government will impose controversial, politically determined values and will hold schools accountable for results without providing for adequate resources. In addition, what people understand by standards varies greatly, so creating consensus on concrete standards—especially in the social sciences and language—is difficult. Other concerns include those of narrowed curricula, teaching to the tests, and the fear that standards will be set either too high (leaving some students behind) or too low (thus becoming meaningless).

\*Several organizations in the United States seek to evaluate the quality of academic standards currently being developed at the state level. The oldest of these endeavors is *Making Standards Matter*, published annually since 1995 by the American Federation of Teachers (AFT). The Council for Basic Education and the Fordham Foundation have also recently started evaluating standards, albeit with slightly different criteria than those used by the AFT.

Sources: American Federation of Teachers, *Making Standards Matter*, 1999 and Ravitch, D., *PREAL Working Paper No. 4*, 1997.

One positive initiative to develop modern education standards has recently emerged. The consortium of Central American ministers of education is working to establish common standards in language, math, and the natural sciences for primary schools. Draft standards have been prepared but have not yet been discussed or approved by any country (**Box 1**).

In South America, the debate over standards is almost non-existent. Ministries of education have little expertise in the area, employers and parents have not developed a coherent demand for standards, and the issue is absent from most national agendas.

Certainly, setting and implementing national standards is no easy task, even where demand and support for standards is strong (**Box 2**). Still, the absence of publicly shared and accepted standards—and the failure to base achievement tests on them—makes it difficult to interpret scores on existing national tests or to measure progress toward agreed upon goals. As a result, parents and employers cannot easily hold schools accountable for student learning nor can they be assured that the education children receive meets necessary standards of quality and relevance.

## Latin American Testing Systems, 1986-1997

Source: Rojas and Esquivel, 1998, in World Bank, *Educational Change in Latin America and the Caribbean*, 1999.

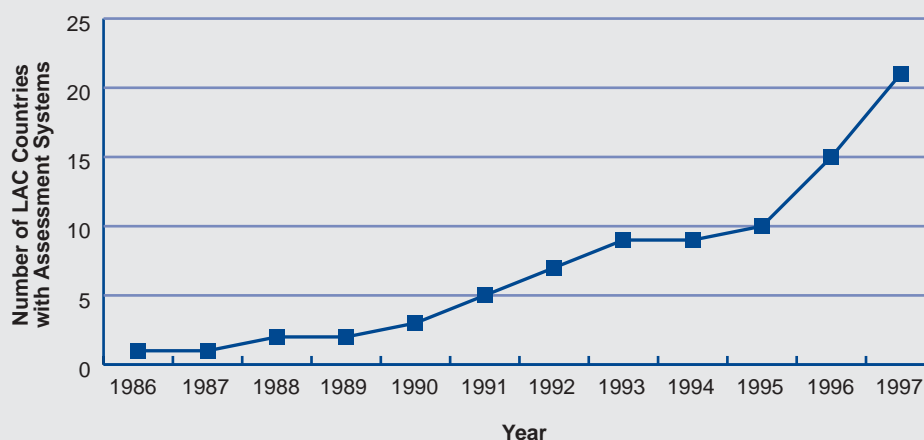
### Assessment: C

The good news is that over the past decade almost every country in the hemisphere has developed a test to measure the most important indicator of education success—student learning (**Figure 7**). All of the tests cover mathematics and language, and at least nine also cover science and social studies (see **Table A.11** in Appendix). Various countries (particularly Chile, Argentina, Mexico, Costa Rica, Colombia, and Brazil) have accumulated considerable national experience. Brazil, Mexico, and Uruguay are also developing achievement tests at the provincial or state level. Several countries are experimenting with promising new ways to find out what students know and can do as well as ways to use the resulting information to affect policy (**Box 3**).

However, few testing programs are firmly institutionalized or well-integrated with other parts of the education system. Many have serious shortcomings, among which are:

- **Weak capacity.** Staff with training in testing and measurement are scarce in many countries. As a result, test design and analysis is generally limited to basic questions and comparisons that have little to do with real life and the complex competencies that modern curricula seek to develop. Procedures to ensure that tests accurately measure student learning are fragile, thus undermining the credibility of results. Few countries can guarantee that assessment results are comparable over time, making the measurement of progress from year to year nearly impossible. Most countries have neither prepared nor committed themselves to a long-term plan to develop their assessment capacity or to periodically review assessment goals.
- **Unclear test objectives.** Because countries have not developed clear content and performance standards, there is no obvious benchmark to guide test design and sampling. This makes it hard to assess the validity of test results and weakens their legitimacy.

FIGURE 7:



### BOX 3 - Innovations in Assessment Use and Practice

#### ***Performance-based/Open-ended testing (Costa Rica)***

Costa Rica is experimenting with performance-based, or open-ended, assessment questions to better assess student learning. Performance, or “constructed response”, questions require students to provide short answers or explanations to support their answers. This exercise provides more information than do standard multiple choice exams about what students actually know. It is important to note, however, that performance-based testing only works if those who grade the tests are fully trained to do so. Chile also plans to incorporate performance-based testing into the SIMCE in the future.

#### ***Using assessments to guide policy (Chile)***

The “900 Schools” program in Chile is a creative example of how assessment results can be used not only to evaluate student achievement, but also to guide policy reforms. The program uses scores on Chile’s national assessment, the SIMCE, to identify schools with the poorest performance (over 1200 schools have been identified thus far). These schools are then provided with education materials, books, infrastructure support, and in-service training to try to improve the learning environment. If their scores subsequently increase, schools receive a financial reward. The results so far are encouraging (scores are improving at participating schools), but there are concerns about the assumption that remedial action should be initiated centrally and that some schools might take advantage of the system by overestimating their number of students in ‘deprived circumstances’ in order to qualify.

#### ***Other Innovations***

Other noteworthy innovations include Mexico’s program to test teacher knowledge and skills; Brazil’s system for assessing higher education; Colombia’s focus on combining assessments with in-depth research; Costa Rica’s testing of learning readiness and use of assessments as a secondary school graduation requirement; and Argentina’s development of learning and in-service training materials based on assessment results.

For more information on these and other programs, see Wolff, L., PREAL *Working Paper* No. 11, 1998 and PREAL Best Practices database ([www.preal.org](http://www.preal.org)).

- **Failure to use test results to improve schools.** Most countries use their testing systems to collect a rich base of information on student achievement and related factors. Unfortunately, most of this information does not reach the people who can use it (students, parents, employers, teachers, policymakers, education officials) in a timely and accessible manner. No effort is made to discuss test results with education stakeholders, and official publications are often too dense and technical for employers and parents to understand how well their schools and students are doing. Teachers and school administrators are seldom given guidance on how to use assessment results to identify weaknesses and improve school performance. Detailed analysis of how specific context and policy factors affect learning is often missing, leaving policymakers to guess which interventions work and which do not. In short, assessment results have little impact on policy or practice. (See **Box 3** for notable exceptions.)
  - **Resistance to testing.** Because a culture of accountability is largely absent, the providers of education—government officials and teachers—tend to distrust or even resist assessments. And those responsible for the assessments tend to resist making public either the results or the methodologies used to obtain them.
  - **Limited participation in global tests.** Countries rarely participate in worldwide tests of academic achievement, and there is no regular Latin American test that compares student learning even across countries within the region. The failure to participate in cross-national testing makes it difficult for countries to judge how their human capital stacks up against that of their neighbors and competitors.
- Because of these shortcomings, testing programs seldom meet the information needs of educators, policymakers, parents, and employers.

## 2. GIVE SCHOOLS AND LOCAL COMMUNITIES MORE CONTROL OVER—AND RESPONSIBILITY FOR—EDUCATION: C

Central governments in many countries have delegated some decision-making to lower levels, and a few countries—most notably in Central America and in several states in Brazil—have dramatically increased school and community control over many aspects of education decision-making (Box 4).

However, few countries have placed significant authority and responsibility in the hands of schools and local communities. Innovative reforms are often limited to new schools in rural areas and are not applied to already-established schools. Most critical decisions—including hiring and firing staff, choosing textbooks, allocating resources, and selecting

### BOX 4 - Increasing School Autonomy in Latin America

**Over the last two decades, Latin America has generated a wide variety of innovative reforms designed to increase school management of and responsibility for education.**

#### **El Salvador: Education with the Participation of the Community (EDUCO)**

This program began in the early 1990s and seeks to promote community participation in education in order to expand coverage and improve school operations in rural areas affected by the civil war. It focuses primarily on pre-primary and primary schools. EDUCO schools are administered by rural parents' associations (ACE) that receive government funding to administer schools, maintain facilities, hire teachers, and obtain teaching materials. EDUCO schools currently have an enrollment of over 200,000 students, constituting 53% of pre-schoolers, 24% of first graders, 16% of second graders, and 11% of third graders. Preliminary evaluations have shown that teacher and student absenteeism is lower among EDUCO schools.

#### **Guatemala: National Self-Management for Educational Development Program (PRONADE)**

This program provides funds to legally organized community groups. These communities then independently manage the provision of local educational services. The objective is to drastically increase basic education coverage, which in 1997 excluded nearly a third of school age children, and the emphasis is on the first three grades of primary school. PRONADE schools are located in poor rural areas, and 80 percent of those enrolled are from predominantly indigenous communities. Recent enrollment stood at 42,000 pre-school and 237,000 elementary students. Among other benefits, studies have found that PRONADE teachers are more punctual and responsible than those in other schools.

#### **Nicaragua: Autonomous Schools Program**

The Autonomous Schools Program aims to use funds more efficiently, mobilize local resources, and increase coverage and student learning. It transfers resources from the central government to School Directive Councils that manage the academic, financial, administrative, and personnel functions of the schools. The councils are composed of the school director, teachers, parents, and students, with parents having the voting majority. Over 80 percent of secondary students and close to 50 percent of primary students are now enrolled in autonomous schools. Preliminary studies indicate that math scores in many autonomous schools have increased. One interesting feature of the Nicaraguan program is that, in addition to administering teachers salaries, schools may also offer teachers up to a 25% salary bonus based on both teacher and student attendance.

#### **Brazil: Minas Gerais Education Pact**

The state of Minas Gerais began in 1991 to give schools the authority to make personnel decisions, decide on the school calendar, and manage pedagogical decisions and evaluations. School directors are selected from a pool of applicants trained in both education and management using new competitive mechanisms. In addition, the school director at each school is responsible for leading a school council composed equally of teachers and parents.

The “Pacto de Minas por la Educación” has demonstrated how system-wide decentralization efforts can result in greater local capacity and improve stakeholders' attitudes about schools. Preliminary evidence also suggests that students at autonomous schools in Minas Gerais may be achieving modest improvements in learning.

Sources: Winkler, D. and A. Gershberg, PREAL Working Paper No. 17, 2000; Gajardo, M., PREAL Working Paper No. 15, 1999; Alvarez, B., *Autonomía Escolar y Reforma Educativa*, 1999; Espinola, V., *¿Es la Autonomía la Clave para una Escuela más Efectiva?*, 1999; Arcia, G. and H. Belli, *Rebuilding the Social Contract: School Autonomy in Nicaragua*, 1998; and PREAL Best Practices database ([www.preal.org](http://www.preal.org)).

**TABLE 2 - Level of decision-making in public primary and secondary schools**

	HIRING/FIRING OF TEACHERS	HIRING/FIRING OF PRINCIPALS	TEACHER PROMOTIONS	SALARIES	INVESTMENTS	MAINTENANCE	BOOKS
Argentina	provincial	provincial	provincial	provincial	agency	provincial	provincial
Bolivia	national	national	national	national	national-SIF	school	home
Brazil -Minas Gerais -Sao Paulo	state/school state/school	school state	state (t.s.) state (t.s.)	state state	school school district	school school district	state state
Chile	municipal	municipal	state (t.s.)	national	municipal	municipal	national
Colombia	departmental	departmental	departmental	national	municipal	municipal	municipal
Costa Rica	national	national	no data	national	national	national	home
Dom. Republic	national	national	national	national	presidency	school	national
Ecuador	national	national	national	national	national	national	national
Guatemala	national	national	national (t.s.)	national	national-SIF	national	national
Jamaica	school	school/Min. of Ed.*	school/Min. of Ed.*	national	national	national	national
Mexico	state	national (u)	state (u)	national	national agency	state	national
Peru	state	state	state	national	national agency	state	home
Uruguay	national	national	no data	national	national	national	no data
Venezuela	national/state (u)	national	national (t.s., u)	national	national agency	national agency	home

Source: Inter-American Development Bank, *Economic and Social Progress in Latin America*, 1996.

(T.S.) According to Teaching Statute

(U) Teachers union participates in the process

\* Schools propose candidates and the Ministry of Education of Jamaica makes the final decision.

Note: Where specific information on the responsible agency was not available, only the level of government is listed. Other cases have been specified in the manner: *agency* (autonomous or subsidiary agency which does not have the status of a ministry) or *national-SIF* (National ministry and Social Investment Fund, separate from the ministry of education).

teacher-training programs—are still made by national ministries or state-level education departments (Table 2). Personnel decisions, which are crucial for improving education quality and outcomes, are least likely to be delegated to schools. Instead, teacher salaries are usually centrally set, based on rigid formulas tied more to seniority than to performance. In El Salvador and Nicaragua, where a significant number of school directors, school councils, or parents associations do have the power to hire and fire teachers, base salary levels are nevertheless established centrally, thus making it difficult for schools to use pay to attract and keep the best candidates. School councils in Nicaragua, for example, may opt to pay teachers more but must themselves finance any salary increases.

School principals and teachers are usually restricted to decisions on pedagogical issues or on small project design. They have little authority to determine

how their schools are run, and the users of education (students, parents, local communities, and employers) have almost no influence in public schools.

The result is that school administrators and teachers in Latin America lack the authority needed to implement changes that might improve education. Without authority and resources, it is impossible to hold schools accountable for results.

To be sure, accountability requires pre-conditions that are not always in place. Most importantly:

- **Local authorities need basic management skills.** In traditionally centralized systems, local authorities are accustomed to following orders sent from above and have little experience in managing their own affairs. They need both training and practice if they are to assume these new roles effectively.

- **Clear goals must be established.** Current decentralization initiatives often lack specific performance goals that lay out what results schools are expected to achieve in return for increased control over how schools are run. It is difficult to demand better results if no one knows what constitutes acceptable performance.
- **Assessment systems to evaluate performance and inform the public must be in place.** School autonomy programs seldom include comprehensive internal monitoring systems or progress reports on student achievement. Education “report cards”, a vital tool in monitoring and holding schools accountable in the United States and Europe, are virtually non-existent in Latin America.
- **Success or failure should bring consequences.** Most countries are reluctant to rate school performance and assign consequences based on that performance, thereby giving schools little incentive to depart from business as usual. Good schools need to be identified so that others can learn from their approaches. Schools with poor academic performance must be improved. While it is certainly unfair to penalize (or reward) schools for social and contextual factors beyond their control, it is equally unfair to allow children in poorly performing schools to be under-served.
- **Parents and other community members must participate.** True accountability requires that employers, parents, and communities participate in making decisions. Responsibilities need to be clearly allocated to and accepted by each participant—then monitored for results. In Nicaragua and Brazil, where governments have made a concerted effort to involve parents in decision-making, the response has been mixed. Everyone must understand that it is not enough to wait for ministry officials to make schools better. Good education depends on each person doing his or her part.

Of course, decentralizing power and responsibility to schools and local communities alone will not guarantee success. Central governments continue to have an important role in assuring that education is of high quality and is available to all students, especially in areas where parents and communities have few resources of their own. The jury is still out on whether modest improvements in student achievement in Nicaragua and Minas Gerais can be repeated and under what conditions school autonomy leads to better educational performance. Nonetheless, initial evidence does suggest that efforts to increase school autonomy are a promising way to turn schools into effective institutions with a sense of identity, cohesion, and commitment.

### 3. STRENGTHEN THE TEACHING PROFESSION BY RAISING SALARIES, REFORMING TRAINING, AND MAKING TEACHERS MORE ACCOUNTABLE TO THE COMMUNITIES THEY SERVE: D

Good teaching requires good teachers, who in turn require good training, good management, and good pay. Yet, Latin American teachers tend to be poorly trained, poorly managed, and inadequately compensated—making it hard for them to do their jobs well.

Two problems—a lack of training and a lack of incentive systems—lie at the heart of the region’s poor quality of teaching. Many countries are working hard to improve training (**Boxes 5 and 6**). But few are working to improve incentive systems, which are much more controversial and which require fundamental changes in how teachers are recruited and managed.

#### TRAINING

Latin American teachers, on average, are inadequately prepared. They have less education than their counterparts in developed countries and the education they do receive is usually of poor quality.

Pre-school and primary teachers generally complete only 14 years of schooling—two years less than what is usually required of teachers in the United States, Europe, and Japan. On average, teachers in the region’s largest country, Brazil, complete only 11.3 years of schooling—less than what amounts to a high school degree in most countries.

**TABLE 3 - Percent of Teachers with University or Equivalent Degree in Selected Countries, 1994**

	Primary School Level	Secondary School Level
Egypt	55	100
Japan	79	93
Indonesia	5	62
Swaziland	1	47
Argentina	17	39
Panama	6	9
Ecuador	1	1

Source: UNESCO, *World Education Report*, 1998.

At the secondary school level, where university training in subject areas is even more important, the region again falls short. Only 39% of secondary school teachers in Argentina, 9% in Panama, and 1% in Ecuador have a university degree. By contrast, almost all secondary teachers in Egypt, Japan, Poland, and Kuwait have university degrees. In Indonesia and Swaziland, about half do (**Table 3**). Nevertheless, some encouraging exceptions exist. Approximately 80% of secondary school teachers in Paraná, Brazil and over half of those in Colombia are university graduates.

#### **BOX 5 - Regional Teachers' Centers: Pre-service Training in Uruguay**

The Uruguayan Regional Teachers' Centers Programme (CERP) is a residential teacher training program that was developed by the National Administration of Public Education (ANEP). It trains middle and high school level teachers in a more intensive environment than do standard programs. Students meet 40 hours per week for 35 weeks over 3 years, compared to 20 hours per week over 4-5 years in the standard program.

CERPs promote equity by attracting more qualified teachers and trainees to outlying areas. They also enhance teacher dignity by demanding high standards. Administrators give particular attention to selecting high quality teacher trainers. Because the program is residential, students are immersed in the culture and challenges specific to the region in which they subsequently teach.

In order to attract talented youth to the program, CERPs offer full fellowships to nearly half their students, provide food subsidies to an additional 20%, and guarantee a teaching position to graduates. Drop-out rates, which are usually about 40-50% in traditional programs, were below 5% during the first year. The CERPs also appear to be attracting some students from households with higher income and education levels. Although the program requires substantial resources up front, reduced drop-out rates make it cost-effective. According to one study, per-student costs are 20 times less than those associated with the old program.

Source: Navarro, J.C. and A. Verdisco, *Teacher Training in Latin America: Innovations and Trends*, 2000.

#### **BOX 6 - Innovations in In-Service Teacher Training**

##### ***Program for the Continuing Education of Teachers (PFPD) - Colombia***

This program was developed as an in-service alternative to the proliferation of short, poor quality courses for teachers. The program prepares teachers to meet the daily challenges of the classroom and to participate in school management using a practice-based, rather than an abstract, theoretical approach. To stress the continuous nature of in-service teacher training, PFPD programs last a minimum of one year and teachers must enroll in a new program every 3-4 years. Teachers receive up to six "points" toward their professional credentials for successful completion of PFPD programs that have been pre-approved for quality, relevance, and incorporation into a larger school improvement plan (Proyecto Educativo Institucional-PEI) by the District Training Committee. Qualified private and public training institutions deliver the training, thereby allowing for diversity in subjects and methodology.

##### ***Teacher Training Program (PLANCLAD) - Peru***

Peru's Programa de Capacitación Docente emphasizes follow-up and support activities that extend beyond formal in-service training. In order to help reinforce lessons learned in training and to encourage their implementation in the classroom, teachers receive at least four individual classroom visits in the six months immediately following their training program. They also participate in two additional follow-up meetings with peers who teach in similar classroom environments. These follow-up activities are expected to become permanent components of the teacher education system in the near future.

Sources: Navarro, J.C. and A. Verdisco, *Teacher Training in Latin America: Innovations and Trends*, 2000 and PREAL Best Practices database ([www.preal.org](http://www.preal.org)).



Pre-service training is generally of low quality. Short training schedules and highly theoretical curriculum often sacrifice real practice in the classroom and thorough subject matter preparation—both of which make for better teachers. Programs are plagued by low prestige, poorly qualified faculty, too much emphasis on theory and lecture, and too little attention to teaching techniques appropriate for disadvantaged students. (Box 5 gives an example of how one country is trying to improve pre-service training.) These deficits are compounded by the poor quality of the elementary and high school education that many—if not most—aspiring teachers receive prior to entering training programs.

As a result, many Latin American countries are turning to in-service training as a way to make up for the inadequacies of traditional pre-service teacher preparation. These programs seek to:

- Upgrade the knowledge and pedagogical skills of poorly qualified teachers;
- Provide specialized knowledge in subject areas where a clear shortage is diagnosed;
- Facilitate the introduction of educational reforms, curriculum innovations, new techniques or new textbooks; and
- Provide an essential component for career development.

Unfortunately, the majority of in-service programs are short, isolated from the demands of classroom and community, not well monitored for quality and relevance, and have minimal impact on improving the skills of most teachers. Teachers are often

rewarded for the accumulation of certificates and have few incentives to put what they have learned to use in the classroom. (Box 6 shows how two countries are addressing these problems.)

## INCENTIVES

While many countries have worked to improve teacher training, few have tackled the difficult issue of establishing incentives that might strengthen the teaching profession. Incentive structures, including teacher compensation, remain largely unchanged and do not necessarily encourage good professional performance. Crucial reforms such as performance evaluations, keying salaries to performance, and letting principals remove mediocre teachers are almost non-existent. Similarly, there are very few efforts to recognize, support, and reward superior classroom teaching. As a result, teaching is not a highly respected profession. Prestige is low, morale is weak, and performance is mediocre.

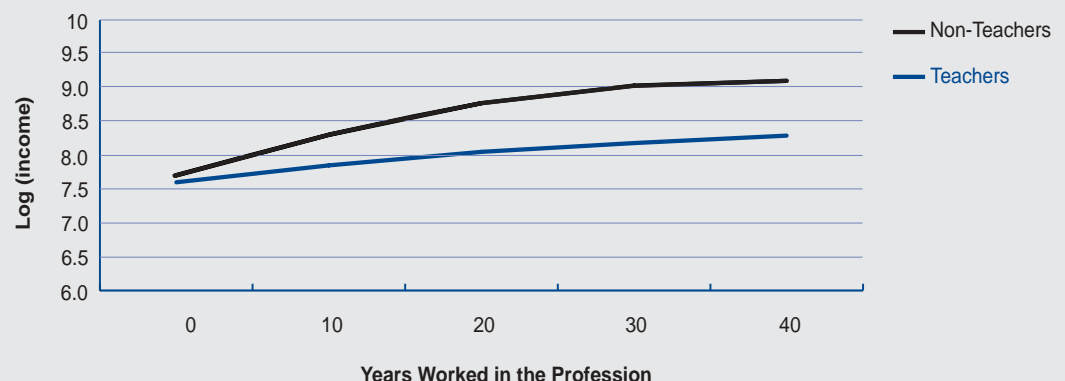
## SALARIES

The issues surrounding teacher salaries are controversial and complex. On the one hand, teachers in many countries appear to earn as much or more than professionals with similar amounts of education and experience once the length of the working day and vacations have been taken into consideration. A recent study found that—after adjusting for the shorter hours and longer vacations that teachers enjoy—teachers' hourly wages in 11 countries (Bolivia, Brazil, Chile, Colombia, Costa

## Earnings Profiles for Teachers vs. Non-Teachers in Brazil

Source: Liang, *Teacher Pay in 12 Latin American Countries*, 1999.

FIGURE 8:





### BOX 7 - Linking Teacher Pay to Performance: Mexico's Carrera Magisterial

Mexico's Carrera Magisterial seeks to increase professionalism in teaching, keep teachers in schools, and improve teachers' standard of living by linking salary to good teaching. Compensation is based on professional skills, teacher performance, and constant upgrading of teacher skills.

As part of the program, teachers undergo an annual performance evaluation including daily classroom activities (35 points), professional skills (25 points), schooling (15 points), completion of accredited courses to update training (15 points), and seniority (10 points). Based on the results of the evaluation, teachers are then awarded pay increases ranging from 28.5% to 224%. By 1997, half of all teachers were participating in the program and nearly a quarter of all students had a Carrera Magisterial teacher. Impact on student performance remains to be evaluated.

The Carrera Magisterial is a voluntary program that targets current primary and secondary teachers with two years experience (as either titled or provisional teachers). It was designed by the Secretariat of Public Education, in conjunction with Mexican teachers unions.

Sources: Liang, X., *Teacher Pay in 12 Latin American Countries*, 1999 and PREAL Best Practices database ([www.preal.org](http://www.preal.org)).

Rica, El Salvador, Honduras, Panama, Paraguay, Uruguay, and Venezuela) were actually higher than those of other workers with the same labor market characteristics.

But compensation systems are clearly not producing the kind of teaching excellence needed. The following are key reasons:

- **Teaching does not pay enough to attract the best and brightest candidates.** Too many teacher training programs attract individuals who, as students, were among the lowest academic achievers. Low teacher salaries are at least in part to blame. In Chile, for example, teachers receive only about 4% more pay for each additional year of schooling while non-teachers receive a salary increase of almost 12% for the same. Experienced teachers in Brazil earn substantially less than their non-teaching counterparts with a similar number of years worked in their profession (Figure 8). The result is that, although beginning teachers earn roughly the same amount as beginning non-teachers, the long-term earning potential for teachers is lower and, subsequently, so is their standard of living.
- **Teacher pay fails to reward good teaching.** Rigid pay scales based entirely on training and seniority leave little room to reward teachers for good performance. Because hard work gains teachers little in terms of additional income or recognition, there is little incentive for teachers to perform well. (Box 7 shows how one country is trying to overcome such difficulties.)

- **Pay structures work against recruiting top quality teachers to disadvantaged public schools.** Teachers earn the highest salaries in high-quality private schools, which rarely serve the poor. Teachers working in rural or other "difficult" areas earn 10-30% less than their urban counterparts, even in countries where compensation policies are specifically designed to reward those in hardship posts. The result is that public schools, particularly in rural areas, often end up with lower quality teachers.

#### NON-MONETARY INCENTIVES

Low salaries are only part of the problem. The absence of non-monetary incentives—regular performance evaluations, classroom support, professional recognition, and standards—also works against good teaching.

- **Most countries have not established standards for teachers and do not evaluate performance.** This lack of assessment makes it hard to manage teacher quality.
- **Teachers receive inadequate support and professional recognition.** Most receive no paid time for lesson planning and other classroom preparation. Incentives for teamwork—and the sense of common school mission it fosters—are almost non-existent. Novice teachers seldom receive guidance from more experienced teachers. Principals lack the skills and authority to build staff into a coherent school team. And good teachers generally receive no public or

professional acknowledgement from school administrators, peers, or parents.

Efforts are under way in a few countries to improve non-salary incentives for teachers (**Box 8**). But most programs have been short-lived and politically charged. And little research has been done to determine what types of teacher incentives produce the greatest impact on student learning.

### **TEACHERS AS PARTICIPANTS IN REFORM**

Teachers have first-hand knowledge about their students and classrooms that is essential to making reforms successful. However, they are rarely involved in designing reforms and are expected to implement what is handed down to them wholeheartedly and with minimal resources. Teacher participation in reform is typically limited to designing pedagogical projects at the school level

and seldom includes involvement in management and school-planning decisions. As a result, teachers feel little ownership of current reforms and have little incentive to change classroom practice.

Part of the problem is the almost exclusive focus that teachers unions place on raising wages, a singular concern that has kept them from playing an important role in efforts to improve learning. Fortunately, this trend may be changing. In the province of Cordoba, Argentina, the leading teachers union has tied requests for better working conditions to increased responsibility for teacher performance and student learning. The Dominican Republic's *Plan Decenal*, developed with teacher input, specifies that pay increases be linked to performance. In Mexico, teachers unions have been actively involved in designing teacher evaluations and a system linking pay to performance (**Box 7**).

## **BOX 8 - Motivating Teacher Excellence: Innovations in Non-salary Incentives**

### ***Teacher Certification (United States)***

The National Board of Teaching Standards in the United States has established a voluntary teacher certification program. Under the program, teachers take an exacting National Board Test, and those who pass are awarded US \$1,000 and state recognition for their achievement. Fees for taking the tests, some US \$2,000, are increasingly being paid by state teachers unions eager to attract the best teachers to their jurisdictions. The program—run by and for teachers—is extremely prestigious, and teachers often participate more for professional satisfaction than for financial reasons.

### ***Teacher Recognition (Colombia)***

After careful negotiation with the national teachers union, Colombia established an ambitious national teacher recognition program that selected one school from each of the country's 2,000 educational districts to receive a prize and community recognition for good standards. One teacher from each winning school was singled out for special distinction, based in part upon student recommendations. Although the program succeeded in raising national consciousness of teacher quality, it was terminated after one year for political reasons.

### ***Teamwork (Chile)***

Competitive funding of projects designed and implemented by teachers themselves, a system of bonuses that rewards the highest performing schools, and the provision of ministry-funded staff time for professional development are all non-salary incentives used to improve teacher quality. They have the added advantage of fostering teamwork among teachers by providing rewards at the school level rather than for individual teachers.

Source: Winkler, D. and A. Gershberg, PREAL *Working Paper No. 17*, 2000.

#### 4. INVEST MORE MONEY PER STUDENT IN PRE-SCHOOL, PRIMARY, AND SECONDARY EDUCATION: C

Latin American governments currently invest an average of 4.6% of GNP each year in education—above the average of 3.9% for developing countries. That figure has increased steadily over the past 15 years. It exceeds that of countries in Eastern and Southern Asia and is not much below the 5.1% invested by developed countries (**Figure 9**). In terms of share of income, countries are making a noteworthy effort to educate their children.

However, these figures are somewhat deceiving because they do not take into account population numbers or age distribution. Since in many (but not all) Latin American countries school-age

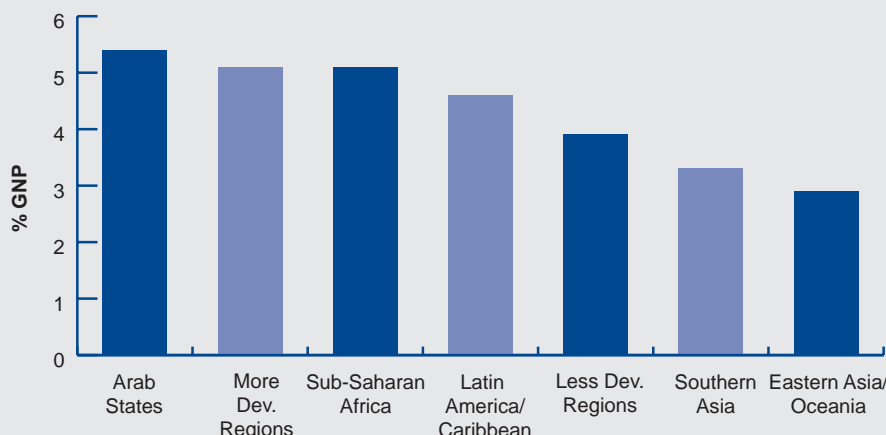
population—as a percentage of total population—is large, it must invest a higher percentage of its GNP just to reach an adequate level of educational capital per child. According to some estimates, bringing the region's labor force up to the schooling levels of other countries with similar incomes will require investing an additional 0.5% of GNP for the next 25 years. Improving the quality of that education will no doubt require even more.

As a result, public funds invested per student at the primary and secondary levels are actually low, even after adjusting for differences in cost of living (**Figure 10**).

#### Estimated Public Expenditure on Education by Region, 1997

Source: UNESCO, *World Education Report*, 2000.

FIGURE 9:

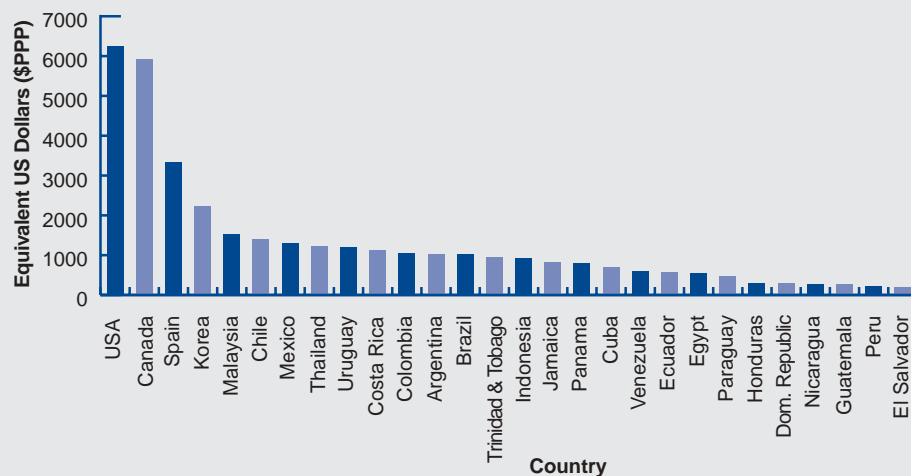


#### Public Spending per Pupil on Primary and Secondary Education (\$PPP)\*, 1997

\*Purchasing Power Parity

Source: Sancho, *El Gasto Público en Educación en las Américas y España*, 2000, unpublished. Based on UNESCO data.

FIGURE 10:



### Ratio of Spending per Pupil: Higher vs. Primary + Secondary Education (\$PPP)\*, 1997

\*Purchasing Power Parity

Source: Sancho, *El Gasto Público en Educación en las Américas y España, 2000*, unpublished. Based on UNESCO data.

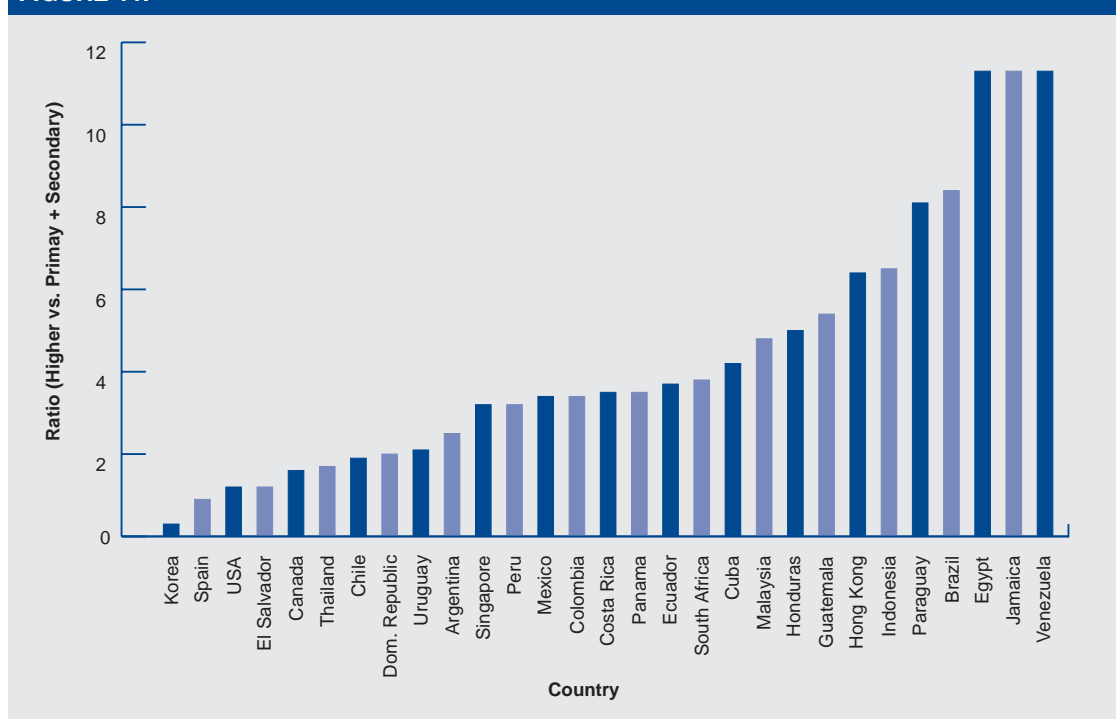
Two facts stand out:

- Government investments per student at the primary and secondary levels vary greatly throughout Latin America—from under \$200 in El Salvador to nearly \$1400 in Chile. Roughly one third of the countries for which we have data invest more than \$1000 per pupil, while another third invest less than \$500. Since the figures have been adjusted for differences in the cost of living, they suggest that governments are highly uneven across the region in the magnitude of their investments per student in primary and secondary schools.
- Latin America invests, per primary and secondary student, at best less than half as much as do developed countries (comparing Chile with Spain) and at worst one thirtieth as much (comparing El Salvador with the United States). To be sure, more money does not necessarily buy better education (as the poor test scores of some U.S. students attest), but this is a remarkable gap. It is hard to argue that governments are equipping their students to compete in the global economy when such vast differences exist.

Furthermore, governments tend to under-invest in primary and secondary education relative to investments at the university level—in part because of the greater political clout of university students (**Figure 11**). Spain, Canada, and the United States invest almost equally per student at the two levels, and Korea invests substantially more at the primary and secondary level. The situation is almost the reverse in Latin America, where countries invest at least twice as much per student at the university level. Two countries—Venezuela and Jamaica—invest eleven times as much. Brazil and Paraguay invest eight times as much. Data from Nicaragua, where spending on university education is known to be high, is noticeably absent.

To be sure, the ideal ratio is hard to establish. But given the large number of children that fail to graduate even from primary school in most countries, the heavy public investments in post-secondary education seem premature at best. In addition, since higher education serves mainly the middle and upper economic sectors of the population, this pattern of spending discriminates significantly against the poor. Without a strong foundation and solid investment in primary and secondary education, higher education in Latin America will remain largely a benefit of the elite.

**FIGURE 11:**



### III. TOWARD A NEW MILLENNIUM

Latin America is falling behind at a time when human resources increasingly constitute the comparative advantage of nations. Good education is decisive in reducing poverty and promoting equity. It prepares citizens for responsible participation in the institutions of democracy and civil society. It encourages entrepreneurial activity and makes workers more flexible, better able to learn on the job, and more capable of making decisions. Unless we make a concerted and sustained effort to improve education, we risk losing out on these social, economic, and political benefits, as well as falling behind our competitors.

We are convinced that providing better schools for all children is the single most important step our countries can take to combat poverty, reduce inequality, and stimulate economic growth.

We also believe that the recommendations contained in our earlier report continue to be of major importance in improving the quality and equity of our schools. Although the order of priority will necessarily vary by country, depending on national conditions, all recommendations address education deficits common to every country in the hemisphere.

Accordingly, we call on policy-makers, political and community leaders, educators, business people, parents, and students to work together to support the following actions:

- Establish national content and performance standards for education in each country and consider doing the same on a regional level.
- Strengthen the assessment systems in each country by creating tests in mathematics, sciences, and language that are comparable across the region.

- Decentralize authority and responsibility all the way to the level of the school, giving principals and community leaders real power to manage staff, curriculum, and budgets.
- Thoroughly reform teacher training and professional development to deepen preparation in specific subjects, emphasize classroom experience, and target problem-solving, critical thinking, and decision-making skills.
- Revitalize the teaching profession by instituting professional evaluations, merit pay, and consequences for poor performance.
- Expand and re-allocate public spending on education in order to increase investment per student at the primary and secondary levels and reduce the discrepancy with the university level.

We must close the gap between what is stated in official declarations and what actually happens in schools. Too often, commitments—such as those made at the Summit of the Americas—remain largely words on paper, with even the most basic goals for expanding coverage unlikely to be met (see **Figure A.5** in Appendix). Long-term political commitment and reforms such as those suggested above are part of the solution. But true change will ultimately depend on convincing teachers, school directors, policy makers, parents, and other leaders to participate in making schools better.

Everyone has a part to play in ensuring that all children have access to a quality education. Together, we can make a difference.

## SUPPLEMENTAL COMMENTS BY MEMBERS OF THE TASK FORCE



### OSVALDO SUNKEL

While recognizing the commendable efforts that have produced this report, I have a few comments intended to make it better. First, the statistical data that document educational development in the region are not only deficient in and of themselves, but fail to show changes over time. Such information is necessary in order to pass fair judgement. I suggest that a greater effort be made in the future to present data on the efforts that some countries are making and the results they are achieving.

I also want to emphasize the need to recognize differences among Latin American countries. Our countries are in very different phases of economic and demographic transition—such that education priorities in Argentina, for example, might be quite different from those in Nicaragua. I recommend establishing a typology that grades countries relative to their level of development and socio-demographic characteristics.

Finally, I propose the creation of an Education Development Index, in the style of the UNDP's Human Development Index. I believe this type of indicator could have a huge impact in the short term, and PREAL has a great opportunity to make an important contribution. It doesn't matter if the Index is weak initially. It can be easily improved upon through meetings and workshops—which themselves would generate very positive debate.

### JUAN CARLOS TEDESCO

While I agree generally with this document, I would like to express two concerns with the report's analysis and recommendations. The first deals with the specifics of the current economic, social, and cultural context in which education reforms take place. In many countries, poverty, inequality, the concentration of income among an elite, and the loss of social capital due to declining confidence in institutions are increasing. These phenomena—widely documented by empirical data—are closely associated with poor results in education. We all agree that education is an important factor for social equity, but it is also important to recognize that a basic level of social equity is a necessary pre-condition for schools to be successful.

The second concern has to do with the effects of certain processes that the report supports (decentralization, for example) on the distribution of education. Various studies—especially in countries like Chile and Argentina—have shown that these processes are linked to an increase in inequality and not, as this document presumes, to increased equality. We need to realize we are facing an issue of significant complexity and that decentralization and school autonomy must be accompanied by efficient mechanisms, managed by central administrations, to compensate for inequalities.

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## CONTEXT

**Table A.1 - Basic Social and Economic Indicators**

	Population (millions) 1998	Average Annual Rate of Population Growth (%) 1990-1997	Population Ages 6-14 (thousands) 1997	GDP per capita (PPP) 1998	Life expectancy at birth (years) 1998	Adult Literacy (% ages 15+) 1998
Canada	30	1.2	3,667	23,582	79.1	99.0
Spain	39	0.1	3,843	16,212	78.1	97.4
United States	270	1.0	35,798	29,605	76.8	99.0
Argentina	36	1.3	5,978	12,013	73.1	96.7
Belize	m	2.6	52	4,566	74.9	92.7
Bolivia	8	2.4	1,734	2,269	61.8	84.4
Brazil	166	1.5	30,764	6,625	67.0	84.5
Chile	15	1.6	2,505	8,787	75.1	95.4
Colombia	41	2.0	7,798	6,006	70.7	91.2
Costa Rica	4	3.0	751	5,987	76.2	95.3
Cuba	11	0.6	1,510	3,967	75.8	96.4
Dominican Rep.	8	1.9	1,636	4,598	70.9	82.8
Ecuador	12	2.2	2,478	3,003	69.7	90.6
El Salvador	6	2.1	1,233	4,036	69.4	77.8
Guatemala	11	2.7	2,601	3,505	64.4	67.3
Haiti	8	1.8	1,973	1,383	54.0	47.8
Honduras	6	3.0	1,443	2,433	69.6	73.4
Jamaica	3	0.9	480	3,389	75.0	86.0
Mexico	96	1.8	19,094	7,704	72.3	90.8
Nicaragua	5	2.9	1,139	2,142	68.1	67.9
Panama	3	1.8	522	5,249	73.8	91.4
Paraguay	5	2.7	1,188	4,288	69.8	92.8
Peru	25	1.8	5,032	4,282	68.6	89.2
Trinidad & Tobago	1	0.7	242	7,485	74.0	93.4
Uruguay	3	0.7	475	8,623	74.1	97.6
Venezuela	23	2.2	4,729	5,808	72.6	92.0
Hong Kong	7	1.9	777	20,763	78.6	92.9
Indonesia	204	1.5	38,817	2,651	65.6	85.7
Korea	46	m	m	13,478	72.6	97.5
Malaysia	22	2.3	4,182	8,137	72.2	86.4
Singapore	3	1.8	430	24,210	77.3	91.8
Thailand	61	1.0	10,098	5,456	68.9	95.0
Egypt	61	2.0	14,494	3,041	66.7	53.7
South Africa	41	1.9	7,991	8,488	53.2	84.6
Zimbabwe	12	1.9	2,810	2,669	43.5	87.2

Source (by column data): ("Population") World Bank, World Development Indicators, 2000; ("Population Growth" and "Population Ages 6-14") UNESCO, World Education Report, 2000; ("GDP", "Life Expectancy", "Adult Literacy") UNDP, Human Development Report, 2000.

Literacy figures for US and Canada based on Human Development Report Office estimates.

GDP per capita (PPP) is not available for Cuba so the subregional weighted average for the Caribbean was used.



## ENROLLMENT

**Table A.2 - Primary and Secondary Net Enrollment, by Country**

### Primary

	1985	1995	1997
Mexico	100	100	100
Cuba	91	99	100
Korea	94	99	100
United States	93	96	100
Canada	95	95	100
Ecuador	m	92	100
Malaysia	m	91	100
Trinidad & Tobago	92	88	100
South Africa	m	96	100
Spain	100	100	100
Indonesia	98	97	99
Brazil	81	90	97
Bolivia	86	m	97
Jamaica	94	100	96
Paraguay	89	89	96
Egypt	m	m	95
Uruguay	87	95	94
Peru	96	91	94
Zimbabwe	100	m	93
Singapore	99	94	91
Dominican Rep.	70	81	91
Panama	90	95	90
Chile	89	86	90
Costa Rica	84	92	89
Hong Kong	96	91	91
Colombia	72	85	89
El Salvador	m	79	89
Honduras	92	90	88
Venezuela	84	82	83
Nicaragua	76	83	79
Guatemala	m	69	74
Belize	87	99	m
Guyana	m	90	m
Haiti	56	m	m

Source 1985/1995: UNESCO, World Education Report, 1998, and Statistical Yearbook, 1998.

Source for 1997: World Bank, World Development Indicators, 2000.

Guatemala and Panama 1997 data from Informe de Desarrollo Sostenible en Centroamérica, 1999

Indonesia, Japan 1994

### Secondary

	1985	1995
Korea	84	96
Spain	m	94*
Canada	88	92
United States	91	89
Cuba	67	82*
Hong Kong	65	71
Egypt	m	67
Trinidad & Tobago	71	65*
Jamaica	57	64
Argentina	m	59*
Chile	m	55
Peru	49	53
South Africa	m	52
Panama	48	51*
Colombia	m	50
Mexico	46	46*
Costa Rica	34	43
Indonesia	m	42
Paraguay	m	33
Bolivia	27	29*
Nicaragua	19	26*
Dominican Rep.	m	22
El Salvador	15	21*
Honduras	m	21
Venezuela	16	20
Brazil	14	19
Guatemala	m	19
Uruguay	56	m

Source: UNESCO, World Education Report, 1998 and 2000.

\*Figures from Wolff and Castro, Secondary Education in Latin America and the Caribbean, 2000.

Guatemala 1997 from Informe de Desarrollo Sostenible en Centroamérica, 1999.

Egypt 1996

El Salvador 1984

## ENROLLMENT

**Table A.3 - Pre-primary and Tertiary Gross Enrollment, by Country**

Pre-Primary			Tertiary		
	1980	1997		1980	1997
Chile (5-5)	71	98	Canada	57	90
Korea (5-5)	8	88	United States	56	81
Cuba (5-5)	59	88	Korea	15	68
Hong Kong (3-5)	81	85	Spain	23	53
Jamaica (3-5)	70	83	Argentina	22	42
Mexico (4-5)	24	73	Singapore	8	39
Costa Rica (5-5)	39	74	Costa Rica	21	33
Panama (5-5)	33	76	Panama	21	32
United States (3-5)	52	70	Chile	12	31
Canada (4-5)	55	64	Uruguay	17	30
Thailand (4-6)	10	62	Hong Kong	10	28
Malaysia (4-5)	23	42	Peru	17	26
Brazil (4-5)	14	58	Ecuador	35	26
Ecuador (5-5)	21	56	Venezuela	21	25
Argentina (4-5)	40	54	Bolivia	16	24
Paraguay (8-8)	12	61	Dominican Rep.	10	23
Venezuela (4-5)	34	44	Egypt	16	23
Peru (3-5)	15	40	Thailand	15	21
Uruguay (2-5)	19	45	El Salvador	13	18
Colombia (3-5)	9	33	Colombia	9	17
El Salvador (4-6)	11	40	South Africa	5	17
Guatemala (5-6)	21	35	Mexico	14	16
Dominican Rep. (3-6)	4	33	Brazil	11	15
Nicaragua (3-6)	8	23	Nicaragua	12	12
Indonesia (5-6)	12	19	Cuba	17	12
Singapore (4-5)	13	19	Honduras	8	11
Trinidad & Tobago (3-4)	8	12	Indonesia	4	11
Honduras (4-6)	9	15	Malaysia	4	11
Spain (2-5)	44	72	Paraguay	9	10
Egypt (4-5)	3	9	Guatemala	8	8
South Africa (5-5)	m	35	Jamaica	7	8
			Trinidad y Tobago	4	8
			Zimbabwe	1	7
			Haiti	1	1
			<b>LAC</b>	<b>14</b>	<b>20</b>
			<b>High Income</b>	<b>34</b>	<b>59</b>

Source: World Bank, World Development Indicators 1999, 2000.  
 Pre-primary 1980 from UNESCO 1998, 1999.  
 Gross enrollment as % of relevant age group  
 Relevant ages for pre-primary in parentheses following country name.

Source: World Bank, World Development Indicators 1999, 2000  
 Gross enrollment as % of relevant age group

## COMPLETION

**Table A.4 - Population aged 25-59 with 12 or More Years of Schooling, 1997**

	Urban	Rural		Urban	Rural
1. Chile	50.0	12.0	8. Honduras	27.0	5.0
2. Panama	47.0	19.0	9. Mexico	26.0	7.0
3. Argentina a/	42.0	m	10. Uruguay	26.0	m
4. Paraguay c/	35.0	m	11. Colombia b/	19.0	4.0
5. El Salvador	33.0	4.0	12. Venezuela d/	17.0	m
6. Dominican Republic	31.0	9.0	13. Nicaragua	16.0	m
7. Costa Rica	27.0	8.0	14. Brazil	12.0	2.0

Source: CEPAL, Panorama Social 1998, Cuadro 25.

a/ Greater Buenos Aires only. b/Beginning in 1993, the geographic coverage of the survey was widened to include practically the entire urban population of the country. c/Includes only Asunción and the Departamento Central. d/ Beginning in 1997, the sample design of the survey does not permit the disaggregation of rural and urban figures. Consequently, the data correspond to the national total. Data for Brazil, Chile, Mexico, and Paraguay are for 1996.

**Table A.5 - Primary Completion Rates for 20-25 year olds, by Income Decile (%)**

	Overall	1	2	3	4	5	6	7	8	9	10
Argentina (1)	97	83	94	92	99	96	98	100	99	99	100
Uruguay (2)	96	88	94	92	95	97	98	99	98	99	99
Bolivia (2)	92	84	89	90	87	94	94	93	94	95	94
Panama	92	75	82	89	89	93	95	96	97	98	99
Ecuador	88	76	85	81	85	83	89	92	93	94	98
Venezuela	88	76	79	79	79	89	91	91	94	96	97
Chile	86	67	75	77	84	85	89	91	94	95	96
Costa Rica	86	64	69	78	77	81	84	92	95	95	99
Mexico	83	52	66	65	70	84	87	91	93	95	92
Peru	78	53	52	56	71	75	78	85	90	91	95
Paraguay	74	49	62	51	60	64	72	75	85	90	93
Honduras	64	39	48	41	46	53	58	71	76	87	87
Nicaragua	60	31	31	44	53	57	62	53	75	82	90
Brazil	57	19	24	33	43	48	57	67	76	85	95
El Salvador	47	17	17	22	25	34	37	52	63	75	85

Source: IDB, Economic and Social Progress in Latin America and the Caribbean 1998-99, Appendix Table 1.2.III.

Based on household surveys conducted from 1994-1996. 1) Includes only Greater Buenos Aires. 2) Includes only urban areas. Lowest income decile is 1 and highest is 10.

**Table A.6 - Secondary Completion Rates for 20-25 year olds, by Income Decile (%)**

	Overall	1	2	3	4	5	6	7	8	9	10
Bolivia (2)	61	51	48	55	52	59	60	60	64	65	83
Peru	61	33	32	36	48	51	60	65	75	82	87
Chile	56	23	31	35	44	50	56	65	74	80	83
Argentina (1)	50	13	17	27	31	42	51	54	65	68	92
Panama	49	11	16	30	33	41	47	57	66	72	84
Uruguay (2)	42	16	21	24	35	35	43	46	51	63	72
Venezuela	40	15	17	26	24	31	32	44	48	53	74
Ecuador	36	14	15	18	29	26	33	40	46	49	73
Mexico	32	4	9	12	16	18	26	32	39	53	70
Costa Rica	30	10	10	11	14	13	18	29	42	44	70
El Salvador	27	8	6	10	9	14	15	27	35	47	69
Brazil	23	2	3	6	9	12	16	22	32	46	73
Paraguay	23	0	2	3	5	4	11	20	34	41	62
Honduras	18	2	3	4	4	9	11	15	23	35	50
Nicaragua	17	3	2	8	8	16	14	15	22	25	43

Source: IDB, Economic and Social Progress in Latin America and the Caribbean 1998-99, Appendix Table 1.2.III.

Based on household surveys conducted from 1994-1996. 1) Includes only Greater Buenos Aires. 2) Includes only urban areas. Lowest income decile is 1 and highest is 10.

## ACHIEVEMENT

**Table A.7 - Student Scores on the First International Comparative Study (UNESCO/OREALC)**

	LANGUAGE		MATHEMATICS	
	Third Grade	Fourth Grade	Third Grade	Fourth Grade
Cuba	343	349	351	353
Argentina	263	282	251	269
Brazil	256	277	247	269
Chile	259	286	242	265
Colombia	238	265	240	258
Mexico	224	252	236	256
Paraguay	229	251	232	248
Bolivia	232	233	240	245
Dominican Rep.	220	232	225	234
Honduras	216	238	218	231
Peru	222	240	215	229
Venezuela	242	249	220	226
Costa Rica	nr	nr	nr	nr

Source: Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación, 1998, 2000.

Data represent the median country score, standardized to regional mean of 250. nr = Data not authorized for release.

**Table A.8 - Mathematics Achievement on the Third International Math and Science Study (TIMSS)**

Seventh Grade		Eighth Grade	
1. Singapore	601	1. Singapore	643
2. Korea	577	2. Korea	607
3. Japan	571	3. Japan	605
4. Hong Kong	564	4. Hong Kong	588
5. Belgium (Fl)	558	5. Belgium (Fl)	565
6. Czech Rep.	523	6. Czech Rep.	564
...		...	
19. Canada	494	18. Canada	527
...		...	
24. United States	476	28. United States	500
...		...	
34. Greece	440	36. Cyprus	474
35. Lithuania	428	37. Portugal	454
36. Portugal	423	38. Iran	428
37. Iran		39. Kuwait	392
38. Colombia	369	40. Colombia	385
39. South Africa	348	41. South Africa	354

Source: "Highlights from Results of TIMSS", International Study Center, Boston College, 1996.

Mean score for each country.

Note: Mexico participated in TIMSS, but did not release results.

**Table A.9 - Eighth Grade Student Achievement on TIMSS 1999 (TIMSS-R)**

Mathematics		Science	
1. Singapore	604	1. Chinese Taipei	569
2. Korea	587	2. Singapore	568
3. Chinese Taipei	585	3. Hungary	552
4. Hong Kong (SAR)	582	4. Japan	550
5. Japan	579	5. Korea	549
6. Belgium (Flemish)	558	6. Netherlands	545
...		...	
10. Canada	531	14. Canada	533
...		...	
16. Malaysia	519	18. United States	515
...		...	
19. United States	502	22. Malaysia	492
<b>International Average</b>	<b>487</b>	<b>International Average</b>	<b>488</b>
27. Thailand	467	24. Thailand	482
...		...	
33. Iran	422	32. Indonesia	435
34. Indonesia	403	33. Turkey	433
35. Chile	392	34. Tunisia	430
36. Philippines	345	35. Chile	420
37. Morocco	337	36. Philippines	345
38. South Africa	275	37. Morocco	323
		38. South Africa	243

Source: TIMSS 1999, International Student Achievement in Mathematics, International Student Achievement in Science, IEA/Boston College, 2000.

Mean score for each country.

## ACHIEVEMENT

**Table A.10 - Median Scores on the First International Comparative Study (UNESCO/OREALC), by Location**

### 3RD GRADE LANGUAGE

	Country Median	Mega-City	Urban	Rural
Cuba	<b>343</b>	346	347	333
Argentina	<b>263</b>	278	263	244
Chile	<b>259</b>	257	265	233
Brazil	<b>256</b>	264	256	237
Venezuela	<b>242</b>	250	241	241
Colombia	<b>238</b>	258	228	234
Bolivia	<b>232</b>	246	242	217
Paraguay	<b>229</b>	n/a	240	222
Mexico	<b>224</b>	242	230	216
Peru	<b>222</b>	250	224	207
Dominican Republic	<b>220</b>	246	212	217
Honduras	<b>216</b>	232	224	209
Costa Rica	<b>n/r</b>	n/r	n/r	n/r

### 4TH GRADE LANGUAGE

	Country Median	Mega-City	Urban	Rural
Cuba	<b>349</b>	358	347	335
Chile	<b>286</b>	283	292	264
Argentina	<b>282</b>	296	283	259
Brazil	<b>277</b>	286	277	265
Colombia	<b>265</b>	276	261	258
Mexico	<b>252</b>	272	260	243
Paraguay	<b>251</b>	n/a	265	243
Venezuela	<b>249</b>	261	248	247
Peru	<b>240</b>	257	252	222
Honduras	<b>238</b>	257	249	227
Bolivia	<b>233</b>	246	237	223
Dominican Republic	<b>232</b>	257	228	227
Costa Rica	<b>n/r</b>	n/r	n/r	n/r

### 3RD GRADE MATH

	Country Median	Mega-City	Urban	Rural
Cuba	<b>351</b>	351	354	345
Argentina	<b>251</b>	271	251	235
Brazil	<b>247</b>	253	247	228
Chile	<b>242</b>	240	245	227
Bolivia	<b>240</b>	245	245	233
Colombia	<b>240</b>	242	235	245
Mexico	<b>236</b>	251	238	231
Paraguay	<b>232</b>	n/a	237	229
Dominican Republic	<b>225</b>	234	222	222
Venezuela	<b>220</b>	227	219	215
Honduras	<b>218</b>	229	230	212
Peru	<b>215</b>	221	220	205
Costa Rica	<b>n/r</b>	n/r	n/r	n/r

### 4TH GRADE MATH

	Country Median	Mega-City	Urban	Rural
Cuba	<b>353</b>	358	353	341
Argentina	<b>269</b>	292	269	253
Brazil	<b>269</b>	273	269	257
Chile	<b>265</b>	263	268	246
Colombia	<b>258</b>	262	252	263
Mexico	<b>256</b>	269	261	249
Paraguay	<b>248</b>	n/a	256	243
Bolivia	<b>245</b>	249	248	239
Dominican Republic	<b>234</b>	246	231	232
Honduras	<b>231</b>	242	239	225
Peru	<b>229</b>	240	235	220
Venezuela	<b>226</b>	226	226	224
Costa Rica	<b>n/r</b>	n/r	n/r	n/r

Source: Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación, 1998, 2000.

Data represents median score, standardized to regional mean of 250, by country and location in megacity, urban, or rural area.

Megacity= population of 1 million or more

Urban=population less than 1 million but greater than 250,000

Rural=population less than 250,000

n/r = Data not reported.

## ASSESSMENT

**Table A.11- National Educational Assessment Systems in Latin America and the Caribbean [1]**

Country (Agency)	Year of Application	Grade Level [2]	Subject Area [3]	International Tests/Year(s) of Participation	Recipient(s) of Published Results [4]
ARGENTINA (SINEC)	1993, 1994	7, 5S, 6S	L, M	OREALC 1997, TIMSS-R 2003, PISA-Plus 2001, PIRLS 2001, IEA-Civic Education 2001, PISA 2003	G, P, U
	1995	3, 9, 5S, 6S	L, M		
		7	L, M, SS, NS		
	1996, 1997, 1998	3, 9, 5S, 6S	L, M		
		6, 7	L, M, SS, NS		
	1999	3, 7, 9	L, M		
	2000	6, 5S*, 6S*	L, M, SS, NS		
		3, 6*, 5S*, 6S*	L, M, SS, NS		
BOLIVIA (SIMECAL)	1996-2000?	1, 3, 6, 8, 4S	L, M	OREALC 1997, ALL 2001	G, U, P
BRAZIL (SAEB)	1990	1, 3, 5, 7	L, M, SS, NS	Two cities participated in ETS mathematics study in 1991. IEA- math and reading 1993, OREALC 1997, PISA 2000	G, P
	1992-1993	1, 3, 5, 7	L, M, SS, NS		
	1995	4, 8, 11	L, M		
	1997	4, 8, 11	L, M, SS, NS		
	1999		L, M, SS, NS		
CHILE (SIMCE)	1988, 1990, 1992, 1994, 1996	4*	L, M, SS, NS, AA	OREALC 1997, TIMSS-R 1998, IALS 1998, IEA-Civic Education 2000	G, U, P
	1989, 1991, 1993, 1997	8*	L, M, SS, NS, AA		
	1990	4*	L, M, SS, NS, AA		
	1992	2S*	AA		
	1993, 1994	2S*	L, M, AA		
	1995	8*	L, M, SS, NS		
	1998	2S*	L, M		
	1999, 2000	4*	L, M		
COLOMBIA (SABER)	1991/1992	3, 5	L, M	TIMSS 1995, OREALC 1997, IEA-Civic Education 2000, PIRLS 2001	G, P
	1993/1994	3, 5, 7, 9	L, M		
	1997/1998	3*, 5*			
	1998/1999	7*, 9*			
COSTA RICA (CENE-EDU)	1986-1988,	3*, 6*, 9*	L, M, SS, NS	OREALC 1997	G, P
	1995	3, 6, 9			
	1996	9			
	1988-2000	Baccalaureate*	L, M, SS, NS, FL		
CUBA	1975	3, 4, 6, 9, 12	L, M	OREALC 1997	
DOMINICAN REPUBLIC (Sistema de Pruebas Nacionales)	1991-1996	8*, Adult Ed.*	L, M, NS, SS	OREALC 1997	U G
	1997-2000	8*, 3 Adult Ed.*, Bacc.*	L, M, NS, SS		
ECUADOR (APRENDO)	1996, 1997, 1998, 2000	3, 7, 10	L, M	Late application of OREALC; results pending.	G, U, P
EL SALVADOR (SABE)	1993/1997	3*, 6*, 9*, 2S*	L, M, NS, SS, HE		P

**Table A.11- National Educational Assessment Systems in Latin America and the Caribbean [1]**

Country (Agency)	Year of Application	Grade Level [2]	Subject Area [3]	International Tests/Year(s) of Participation	Recipient(s) of Published Results [4]
<b>GUATEMALA (SINMELA)</b>	1997, 1998, 1999, 2000	3, 6. En 1999: 3S	L, M		G, U, P
<b>HONDURAS (UMCE)</b>	1997, 2000	3*, 6*	L, M	OREALC 1997	
	1998	2, 3, 4, 6	L, M		
	1999	2, 3, 4, 5	L, M		
<b>MEXICO (SNEE)</b>	1996-2000			OREALC 1997, PISA 2000	G, U
Eval. of Prim. Ed. (EVEP)	1996-2000	1 to 6	L, M, NS, SS		G, U, P
Eval. of Nat. Standards in Primary Ed.	1997-2000	1 to 6	L, M		G
Eval. Of Nat. Standards in Secondary Ed.	1997-2000	1S, 2S, 3S	L, M		G, U
"School Progress" in Carrera Magisterial	1995-2000	3,4,5,6,1S,2S	L, M, NS, SS, FL		G, U, P
<b>NICARAGUA (Dirección de Evaluación)</b>	1996-1997	4, 3S	L, M		
<b>PANAMA (SINECE)</b>	1985-1988	6, 6S	L, M, NS, SS		
	1992	3*, 6S*			
	1995		L, M		
	1997	3, 6, 3S, 6S	L, M, NS, SS		
<b>PARAGUAY (SNEPE)</b>	1996	6	L, M	OREALC 1997	G, U
	1997	3, 9	L, M		
<b>PERU (CRECER)</b>	1996	4	L, M	OREALC 1997, PISA Plus 2001	G, U
	1998	4, 6, 4S, 5S	L, M, NS, SS		
<b>UNITED STATES (NAEP)</b>	1969-1982	4, 8, 12	L, M, SS, NS, A	All IEA studies, PISA	
	1984	4, 8, 12	L		
	1986	4, 8, 12	L, M, SS, NS, T		
	1988, 1994	4, 8, 12	L, SS		
	1990	4, 8, 12	L, M, NS		
	1992	4, 8, 12	L, M		
	1996-2000	4, 8, 12	M, NS		
<b>URUGUAY (UMRE)</b>	1996	6*	L, M, AA		G, U, P
	1998	3	L, M, NS, SS		U, P
	1999	6	L, M, AA		G, U, P
		3S*	L, M, NS, SS		G, U, P
<b>VENEZUELA (SINEA)</b>	1998	3, 6, 9	L, M	OREALC 1997	

[1] Information includes only national assessment systems. Some countries like Argentina, Brazil & the United States also have sub-national assessment systems.

[2] Secondary grades are marked as "S". All tests are sample based unless otherwise noted. Entries marked with an asterisk are administered to all students.

[3] L=Language, M=Mathematics, CL=Computer Literacy, SS=Social Sciences, NS=Natural Sciences, HE=Health Education, AE=Art Education, AA=Attitudes, FL=Foreign Language, T=Technology.

[4] G=Government [high level officials of Ministries, planning units, etc.]. U=Users [teachers principals, parents & students]. P=general public & media.

Elaborated by J. Guillermo Ferrer.

Sources:

a. Personal and e-mail communications with heads of assessment units

b. National reports

c. Palafox, J.C. Sistemas de evaluación de la calidad de la educación en America Latina y el Caribe.

d. Wolff, L. 1998. Educational Assessments in Latin America: Current Progress and Future Challenges. Working Paper No. 11. Washington, D.C.: PREAL.

e. Rojas, C. and J.M. Esquivel. 1998. Los sistemas de medición del logro académico en Latinoamérica. Washington DC, Banco Mundial (LCSHD Paper series 25).

## EQUITY - Income Differences

**Table A.12 - Average Years of Education for 25 year olds, by Income Decile**

	Overall	1	2	3	4	5	6	7	8	9	10
Argentina*	<b>9.44</b>	7.04	7.48	7.74	7.71	8.52	8.82	8.99	9.91	11.13	13.57
Bolivia**	<b>8.80</b>	5.96	6.45	7.23	7.67	7.58	8.32	9.15	9.29	10.38	13.12
Chile	<b>8.79</b>	6.24	6.88	7.09	7.40	7.69	8.16	8.47	9.80	10.88	12.83
Panama	<b>8.68</b>	4.31	5.36	6.30	7.07	7.53	8.16	8.78	9.90	10.88	13.57
Uruguay**	<b>8.02</b>	6.03	6.31	6.54	6.49	6.79	7.34	8.00	8.68	9.74	11.87
Peru	<b>7.20</b>	3.87	4.17	4.95	5.69	6.60	7.05	7.66	8.28	9.04	10.80
Venezuela	<b>7.15</b>	4.66	4.94	5.27	5.72	6.23	6.68	7.20	7.78	8.58	10.81
Ecuador	<b>7.12</b>	3.39	4.39	5.07	5.61	5.64	6.85	7.74	8.23	9.19	11.83
Costa Rica	<b>6.94</b>	4.08	4.88	5.39	5.54	5.91	6.31	6.75	7.65	8.62	11.53
Mexico	<b>6.23</b>	2.14	2.95	3.78	4.15	4.78	5.66	6.06	7.24	8.89	12.13
Paraguay	<b>6.06</b>	3.37	3.67	3.88	4.59	4.81	5.46	5.96	6.62	7.88	10.72
Brazil	<b>5.22</b>	1.98	2.49	2.97	3.41	3.66	4.40	4.99	5.98	7.43	10.53
El Salvador	<b>4.88</b>	1.63	2.14	2.40	2.75	3.27	3.99	4.73	5.90	7.11	10.27
Honduras	<b>4.74</b>	2.07	2.33	2.47	3.06	3.59	3.90	4.70	5.76	6.86	9.58
Nicaragua	<b>4.74</b>	2.17	2.05	2.65	3.33	4.11	4.55	4.94	5.46	6.46	8.49

Source: IDB, Economic and Social Progress in Latin America and the Caribbean 1998-99, Appendix Table 1.2.III, Education. (Based on household surveys conducted from 1994-1996.)

\* The surveys for Argentina include only Greater Buenos Aires.

\*\* The surveys for Bolivia and Uruguay include only urban areas.

Lowest income decile is 1 and highest is 10.

**Table A.13 - Preschool Gross Enrollment Rates (%) by Level of Income (Urban & Rural)**

	Very Poor	Poor	Non-Poor	Total
Jamaica	75.3	79.1	91.4	<b>84.2</b>
Brazil	51.6	57.2	77.8	<b>63.8</b>
Peru	49.7	51.9	66.2	<b>57.4</b>
El Salvador	32.3	34.6	58.8	<b>44.4</b>
Chile	26.5	26.6	42.7	<b>33.5</b>
Honduras	31.7	30.5	34.1	<b>32.2</b>
Ecuador	19.2	23.0	37.0	<b>29.1</b>
Nicaragua	7.7	11.0	40.0	<b>24.2</b>
Costa Rica	2.4	2.1	12.6	<b>5.9</b>

Source: World Bank, Educational Change in Latin America and the Caribbean, 1999, Annex D

**Table A.15 - Secondary Gross Enrollment Rates (%) by Level of Income (Urban & Rural)**

	Very Poor	Poor	Non-Poor	Total
Peru	82.0	83.5	88.5	<b>85.9</b>
Chile	77.3	77.9	87.3	<b>82.4</b>
Jamaica	67.6	68.2	76.9	<b>72.2</b>
Ecuador	57.9	62.5	80.8	<b>71.5</b>
Costa Rica	63.3	63.6	79.4	<b>71.2</b>
Brazil	53.9	57.2	77.9	<b>66.7</b>
Nicaragua	35.2	41.4	76.5	<b>59.2</b>
Honduras	50.5	45.9	64.7	<b>55.5</b>
El Salvador	39.6	43.3	60.4	<b>52.8</b>

Source: World Bank, Educational Change in Latin America and the Caribbean, 1999, Annex D

**Table A.14 - Primary Gross Enrollment Rates (%) by Level of Income (Urban & Rural)**

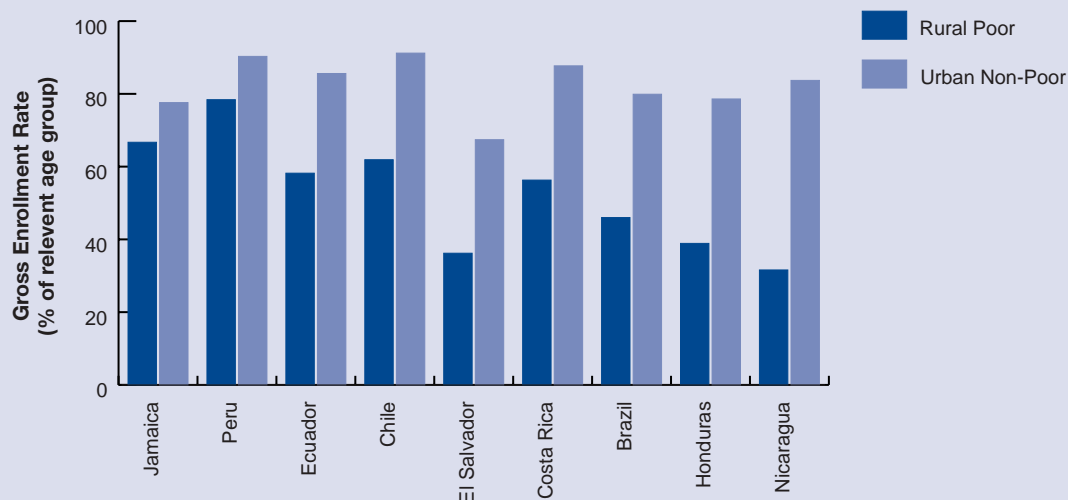
	Very Poor	Poor	Non-Poor	Total
Jamaica	98.5	98.3	99.0	<b>98.6</b>
Chile	95.4	96.3	98.1	<b>97.1</b>
Peru	93.6	94.7	98.0	<b>96.1</b>
Ecuador	89.1	90.9	96.3	<b>93.3</b>
Brazil	83.3	86.8	96.7	<b>90.3</b>
Honduras	86.9	87.6	93.5	<b>90.2</b>
Costa Rica	79.4	81.4	90.8	<b>85.1</b>
El Salvador	75.0	79.9	90.0	<b>84.4</b>
Nicaragua	51.7	59.9	87.3	<b>72.8</b>

Source: World Bank, Educational Change in Latin America and the Caribbean, 1999, Annex D



## EQUITY - Rural/Urban Differences

**Figure A.1 - Difference in Secondary Gross Enrollment Rates, Rural Poor vs. Urban Non-Poor**



Source: World Bank, Educational Change in Latin America and the Caribbean, 1999, Annex D

**Table A.16 - Percent of the Population aged 25-59, by years of schooling, 1997**

	URBAN AREAS				RURAL AREAS			
	0 to 5	6 to 8	9 to 11	12 and up	0 to 5	6 to 8	9 to 11	12 and up
Chile	12.0	21.0	17.0	50.0	40.0	37.0	10.0	12.0
Panama	10.0	26.0	18.0	47.0	31.0	39.0	11.0	19.0
Argentina a/	10.0	34.0	14.0	42.0	m	m	m	m
Paraguay c/	20.0	33.0	12.0	35.0	m	m	m	m
El Salvador	33.0	18.0	16.0	33.0	79.0	13.0	5.0	4.0
Dominican Republic	32.0	23.0	14.0	31.0	62.0	22.0	8.0	9.0
Costa Rica	12.0	33.0	29.0	27.0	30.0	48.0	14.0	8.0
Honduras	33.0	30.0	10.0	27.0	71.0	22.0	3.0	5.0
Mexico	18.0	27.0	29.0	26.0	52.0	28.0	14.0	7.0
Uruguay	12.0	37.0	25.0	26.0	m	m	m	m
Colombia b/	33.0	16.0	32.0	19.0	75.0	10.0	11.0	4.0
Venezuela d/	19.0	34.0	30.0	17.0	m	m	m	m
Nicaragua	27.0	29.0	28.0	16.0	m	m	m	m
Brazil	49.0	19.0	20.0	12.0	85.0	9.0	5.0	2.0

Source: CEPAL, Panorama Social 1998, Cuadro 25.

a/ Greater Buenos Aires only.

b/Beginning in 1993, the geographic coverage of the survey was widened to include practically the entire urban population of the country.

c/Includes only Asunción and the Departamento Central.

d/ Beginning in 1997, the sample design of the survey does not permit the disaggregation of rural and urban figures. Consequently, the data correspond to the national total.

Data for Brazil, Chile, Mexico and Paraguay are for 1996.

## EQUITY - Rural/Urban Differences

**Table A.17 - Pre-primary Gross Enrollment Rates (%), by Level of Income (Urban vs Rural)**

	VERY POOR		POOR		NON-POOR		TOTAL	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Brazil	59.0	42.1	62.8	44.8	79.3	60.6	<b>70.0</b>	<b>45.1</b>
Colombia	49.7	m	52.1	m	69.5	m	<b>59.7</b>	<b>m</b>
Costa Rica	4.3	1.5	3.2	1.5	16.1	6.3	<b>9.5</b>	<b>2.7</b>
Chile	32.5	11.3	32.6	11.2	45.0	23.7	<b>38.2</b>	<b>14.2</b>
Ecuador	21.1	18.3	28.5	19.7	41.9	25.5	<b>36.5</b>	<b>21.3</b>
El Salvador	41.2	29.9	43.5	30.8	66.5	37.8	<b>57.9</b>	<b>32.3</b>
Honduras	32.2	31.6	31.3	30.2	39.6	28.9	<b>36.5</b>	<b>29.7</b>
Jamaica	80.1	73.8	83.6	76.5	93.2	87.8	<b>89.1</b>	<b>79.5</b>
Nicaragua	16.1	5.6	20.3	7.6	46.7	22.2	<b>38.6</b>	<b>11.0</b>
Peru	36.2	37.5	36.8	38.4	57.0	56.5	<b>47.7</b>	<b>40.8</b>

Source: World Bank, Educational Change in Latin America and the Caribbean, 1999, Annex D

**Table A.18 - Primary Gross Enrollment Rates (%), by Level of Income (Urban vs Rural)**

	VERY POOR		POOR		NON-POOR		TOTAL	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Brazil	85.8	80.0	88.9	81.9	97.0	92.5	<b>92.7</b>	<b>82.3</b>
Colombia	90.7	m	92.6	m	97.4	m	<b>94.7</b>	<b>m</b>
Costa Rica	83.2	78.1	85.6	79.1	92.3	87.9	<b>89.3</b>	<b>81.4</b>
Chile	96.8	92.4	97.5	93.3	98.6	93.8	<b>98.0</b>	<b>93.4</b>
Ecuador	89.2	89.0	92.4	90.2	97.2	94.2	<b>95.4</b>	<b>91.2</b>
El Salvador	84.7	72.2	90.0	74.8	92.9	83.0	<b>91.9</b>	<b>77.0</b>
Honduras	93.3	85.3	90.3	86.7	96.0	90.4	<b>93.9</b>	<b>87.9</b>
Jamaica	98.1	98.6	98.3	98.3	99.2	98.9	<b>98.8</b>	<b>98.5</b>
Nicaragua	62.0	49.0	73.7	54.5	88.5	83.4	<b>84.1</b>	<b>61.0</b>
Peru	94.5	93.0	95.9	93.6	98.5	95.4	<b>97.3</b>	<b>93.9</b>

Source: World Bank, Educational Change in Latin America and the Caribbean, 1999, Annex D

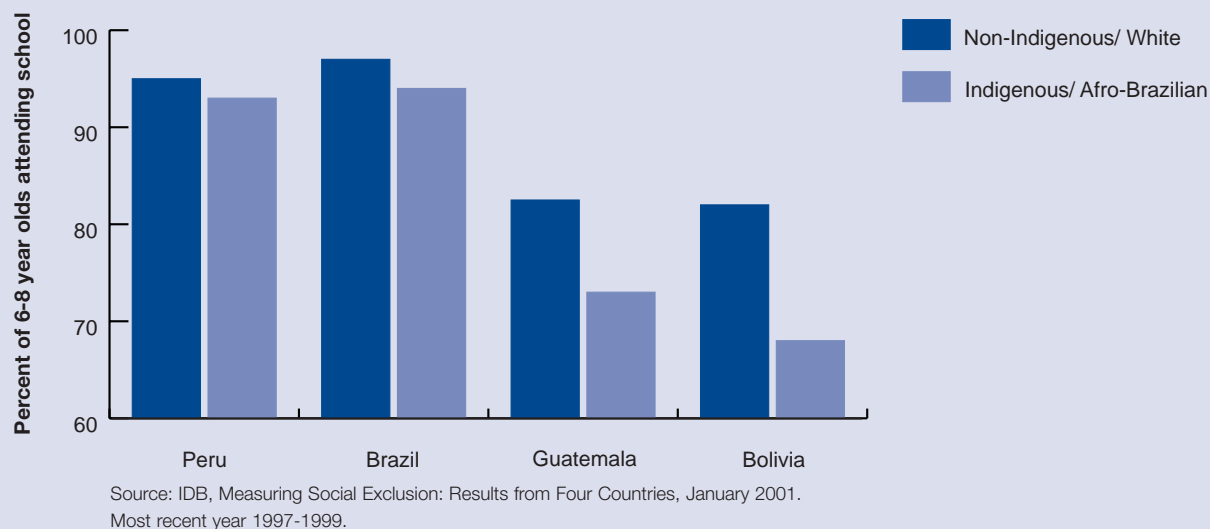
**Table A.19 - Secondary Gross Enrollment Rates (%), by Level of Income (Urban vs Rural)**

	VERY POOR		POOR		NON-POOR		TOTAL	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Brazil	58.8	47.1	61.9	46.0	79.9	57.2	<b>71.8</b>	<b>48.3</b>
Colombia	70.3	m	73.7	m	86.6	m	<b>80.0</b>	<b>m</b>
Costa Rica	75.2	58.6	76.8	56.3	87.7	65.5	<b>83.5</b>	<b>59.5</b>
Chile	83.2	64.3	84.1	61.9	91.2	58.8	<b>87.9</b>	<b>61.1</b>
Ecuador	64.7	55.0	69.7	58.2	85.6	67.5	<b>80.1</b>	<b>60.9</b>
El Salvador	53.4	36.1	56.5	36.2	67.4	42.7	<b>64.4</b>	<b>38.5</b>
Honduras	75.6	44.0	66.0	38.9	78.6	46.0	<b>74.8</b>	<b>41.6</b>
Jamaica	67.2	67.8	71.2	66.7	77.6	75.9	<b>75.1</b>	<b>69.7</b>
Nicaragua	52.4	30.4	62.2	31.6	83.7	51.9	<b>77.5</b>	<b>36.7</b>
Peru	88.2	78.0	88.0	78.4	90.3	75.1	<b>89.4</b>	<b>77.8</b>

Source: World Bank, Educational Change in Latin America and the Caribbean, 1999, Annex D

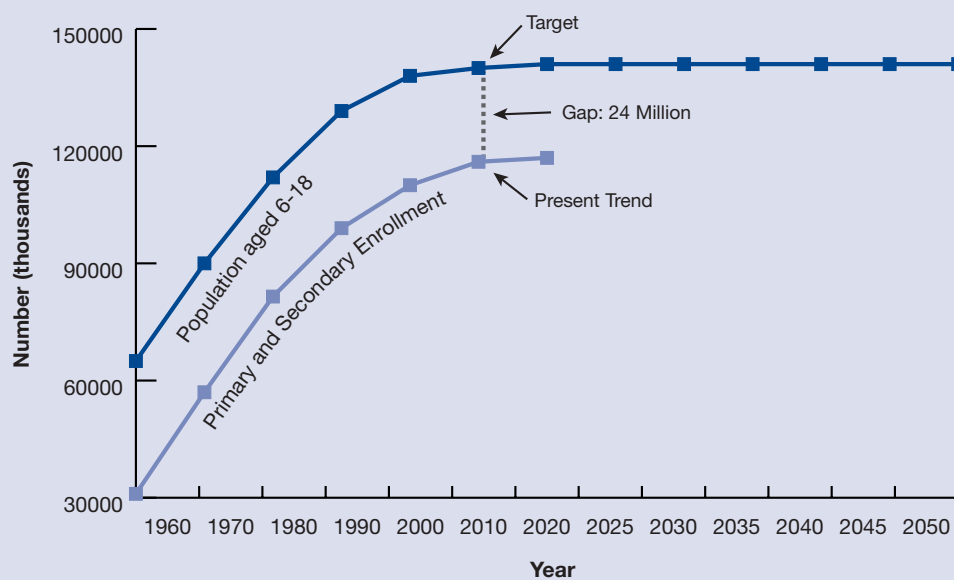
## EQUITY - Ethnic/Racial Differences

**Figure A.2 - Attendance Rates in the First Two Years of Schooling, by Race/Ethnicity**



## SUMMIT GOALS

**Figure A.3 - Projected Progress Toward Summit of Americas Enrollment Goals**



Source: World Bank, Educational Change in Latin America and the Caribbean, 1999.

## GENDER

**Table A.20 - Youth Illiteracy Rate (%), ages 15-24, by Gender**

	1980		1996	
	M	F	M	F
Argentina	3	3	2	1
Bolivia	7	20	2	7
Brazil	14	12	10	6
Chile	3	3	2	1
Colombia	8	7	4	3
Costa Rica	4	3	2	2
Cuba	2	2	0	0
Dominican Republic	18	17	10	9
Ecuador	6	9	3	4
El Salvador	19	24	12	13
Guatemala	26	43	15	28
Haiti	53	57	38	38
Honduras	27	27	19	16
Jamaica	17	8	10	3
Mexico	6	10	3	4
Nicaragua	35	32	30	24
Panama	6	8	3	4
Paraguay	6	7	3	3
Peru	4	13	2	5
Trinidad and Tobago	4	7	2	3
Uruguay	2	1	1	1
Venezuela	6	6	3	2

Source: World Bank, World Development Indicators 2000, Table 2.12

**Table A.21 - Pre-Primary Gross Enrollment Rate (%), by Gender, 1996**

	M	F
Argentina (3-5)	53	56
Belize (3-4)	26	28
Canada (4-5)	64	64
Chile (5)	97	98
Colombia (3-5)	33	34
Costa Rica (5)	71	70
Cuba (5)	88	87
Dominican Republic (3-5)	33	33
Ecuador (5)	55	56
El Salvador (4-6)	39	42
Guatemala (5-6)	35	34
Guyana (4-5)	89	89
Honduras (4-6)	13	14
Mexico (4-5)	72	74
Nicaragua (3-6)	23	24
Paraguay (5)	51	71
Peru (3-5)	36	37
United States (3-5)	71	70
Uruguay (3-5)	44	46
Venezuela (3-5)	44	45

Source: UNESCO, World Education Report, 2000  
Relevant age group in brackets

**Table A.22 - Primary Gross Enrollment Rate (%), by Gender**

	1990		1996	
	M	F	M	F
Argentina	m	m	114	113
Belize	113	110	123	119
Bolivia	99	90	m	m
Canada	104	102	103	101
Chile	101	99	103	100
Colombia	95	109	113	112
Costa Rica	101	100	104	103
Cuba	99	96	108	104
Dominican Republic	m	m	94	94
Ecuador	m	m	134	119
El Salvador	81	82	98	96
Guatemala	86	76	93	82
Guyana	98	97	97	96
Haiti	49	46	m	m
Honduras	105	110	110	112
Jamaica	102	101	100	99
Mexico	115	112	116	113
Nicaragua	91	96	100	103
Panama	108	104	m	m
Paraguay	107	103	112	109
Peru	119	116	125	121
Trinidad & Tobago	97	96	99	98
United States	103	101	102	101
Uruguay	109	108	109	108
Venezuela	94	97	90	93

Source: UNESCO, World Education Report, 2000

**Table A.23 - Secondary Gross Enrollment Rate (%), by Gender**

	1990		1996	
	M	F	M	F
Argentina	m	m	73	81
Belize	39	44	47	52
Bolivia	40	34	m	m
Canada	101	101	105	105
Chile	71	76	72	78
Colombia	47	53	57	66
Costa Rica	41	43	45	49
Cuba	83	95	76	85
Dominican Republic	m	m	47	61
Ecuador	m	m	50	50
El Salvador	26	27	32	36
Guatemala	m	m	27	25
Guyana	81	86	73	78
Haiti	21	20	m	m
Honduras	29	37	m	m
Jamaica	63	67	m	m
Mexico	53	54	64	64
Nicaragua	34	47	50	60
Panama	60	65	m	m
Paraguay	30	32	42	45
Peru	m	m	72	67
Trinidad & Tobago	78	82	72	75
United States	93	94	98	97
Venezuela	29	40	33	46

Source: UNESCO, World Education Report, 2000

## GENDER

**Table A.24 - Percent Cohort to Grade 5, by Gender**

	1980		1995	
	M	F	M	F
Chile	94	97	100	100
Colombia	36	39	70	76
Costa Rica	77	82	86	89
Ecuador	m	m	84	86
El Salvador	46	48	76	77
Guatemala	m	m	52	47
Haiti	33	34	m	m
Jamaica	91	91	m	m
Mexico	m	m	85	86
Nicaragua	40	47	52	57
Panama	74	79	m	m
Paraguay	59	58	77	80
Peru	78	74	m	m
Trinidad and Tobago	85	87	97	97
Uruguay	m	m	97	99
Venezuela	m	m	86	92

Source: World Bank, World Development Indicators, 2000, Table 2.11

**Table A.25 Secondary Completion (%), by Gender, 1998**

	M	F
Argentina	35	39
Brazil	32	44
Canada	67	78
Chile	48	57
Paraguay	18	24
United States	70	77

Source: OECD, Education at a Glance, 2000, Table C2.2  
Ratio of upper secondary graduates to total population at typical age of graduation (times 100)

## TEACHERS

**Table A.26 - Average Years of Schooling for Pre-Primary and Primary Teachers, 1997**

Chile (1995)	15.6
Ecuador*	14.7
Bolivia	14.5
Costa Rica	14.2
Panama	14.2
Paraguay* (1996)	14
Uruguay*	13.3
Brazil (1996)	11.3

Source: CEPAL, Panorama Social, 1998  
\*Data for urban teachers only.

**Table A.27 - Hours Worked per Week by Teachers and Other Professionals/Technicians, 1997**

	All teachers	All professionals & technicians*
Ecuador	41	46
Chile (1995)	39	46
Costa Rica	38	46
Panama	38	45
Paraguay (1996)	35	47
Uruguay	32	44
Brazil (1996)	29	41
Bolivia	25	42

Source: CEPAL, Social Panorama, 1998  
Ecuador, Paraguay, and Uruguay urban data only.  
\* Except primary and secondary teachers

## TEACHERS

**Table A.28 - Annual Statutory Teachers' Salaries, Primary Teachers in Public Institutions, US\$(PPP), 1998**

	Start	15 years experience	Top
Spain	25,319	29,590	37,479
United States	25,165	33,973	42,185
Korea	24,150	39,921	66,269
<b>OECD Average</b>	<b>20,530</b>	<b>28,441</b>	<b>35,737</b>
Chile	12,711	15,233	21,237
Mexico	10,036	12,450	19,346
Philippines	8,210	8,382	12,408
Jordan	7,326	11,594	26,917
Argentina	6,759	9,442	11,206
Malaysia	6,550	10,876	15,554
Thailand	6,412	15,759	42,867
Uruguay	6,225	7,458	13,340
Brazil	4,732	6,451	15,522
Indonesia	2,768	3,992	8,321

Source: OECD, Education at a Glance, 2000

Figures for non-OECD are for 1997.

All salaries for candidates with minimum training levels, expressed in terms of purchasing power parity (PPP).

**Table A.29 - Annual Statutory Teachers' Salaries, Upper Secondary Teachers in Public Institutions, US\$(PPP), 1998**

	Start	15 years experience	Top
Spain	29,547	34,547	44,053
United States	24,869	35,455	43,457
Korea	24,150	39,921	66,269
<b>OECD Average</b>	<b>23,201</b>	<b>33,050</b>	<b>41,616</b>
Chile	12,711	15,915	22,209
Malaysia	12,535	19,819	27,417
Argentina	10,837	15,773	19,147
Philippines	8,210	8,382	12,408
Brazil	8,148	11,152	14,530
Jordan	7,326	11,594	26,917
Uruguay	6,847	8,204	14,672
Thailand	6,412	15,759	42,867
Indonesia	3,659	5,150	8,321
Mexico	m	m	m

Source: OECD, Education at a Glance, 2000

Figures for non-OECD countries are for 1997 and include all secondary programs.

Figure for OECD countries include only general secondary education programs. They exclude vocational secondary programs.

All salaries for candidates with minimum training levels, expressed in terms of purchasing power parity (PPP).

## TEACHERS

**Table A.30 - Total Household Income Represented by Teacher Wages**

	Percent
Costa Rica	56
Honduras	54
Colombia	53
El Salvador	52
Panama	52
Ecuador	48
Bolivia	47
Chile	46
Uruguay	40
Venezuela	35
Brazil	30
Paraguay	20

Source: Liang, Teacher Pay in 12 Latin American Countries, 1999

**Table A.31 - Incidence of Poverty and Economic Vulnerability, by Occupation, 1997**

	ALL TEACHERS		ALL PROFESSIONALS & TECHNICIANS		ALL WAGE EARNERS	
	% in Poverty	% in Vulnerable Households	% in Poverty	% in Vulnerable Households	% in Poverty	% in Vulnerable Households
Bolivia	29	38	13	22	42	29
Brazil	11	19	6	14	27	26
Chile	2	10	2	7	14	31
Costa Rica	0	11	3	12	12	29
Ecuador	30	42	17	32	45	32
Mexico	6	37	12	26	44	31
Panama	2	9	3	12	21	27
Paraguay	7	41	6	21	28	37
Uruguay	0	4	1	6	6	21

Source: CEPAL, Social Panorama, 1998, Table IV.10.

Data for 1997 except Chile 1995, Brazil, Mexico, and Paraguay 1996.

Bolivia, Ecuador, Paraguay, and Uruguay urban data only. Figures for professionals exclude primary and secondary teachers. Percent in vulnerable households means % of employed persons who live in households with income insufficient to support a family of 2+ people outside of poverty.

## FINANCE

**Table A.32 - Public Spending on Education (as % total government expenditures)**

	1980	1985	1990	1996
Singapore	7.3	m	18.2	23.4
Mexico	m	m	12.8	23.0
Costa Rica	22.2	22.7	20.8	22.8
Venezuela	14.7	20.3	12.0	22.4
Panama	19.0	18.7	20.9	20.9
Thailand	20.6	18.5	20.0	20.1
Belize	14.5	15.4	18.5	19.5
Peru	15.2	15.7	m	19.2
Colombia	19.2	19.5	16.0	19.0
Paraguay	16.4	16.7	9.1	18.6
Korea	m	m	m	17.5
Hong Kong	14.6	18.4	17.4	17.0
Honduras	14.2	13.8	m	16.5
Guatemala	16.6	12.4	11.8	15.8
Uruguay	10.0	9.3	15.9	15.5
Malaysia	14.7	16.3	18.3	15.4
Chile	11.9	15.3	10.0	14.8
United States	m	15.5	12.3	14.4
El Salvador	17.1	12.5	16.6	14.1
Canada	16.3	11.9	14.2	13.5
Dom. Republic	16.0	14.0	8.9	13.4
Ecuador	33.3	20.6	17.2	13.0
Jamaica	13.1	12.1	12.8	12.9
Argentina	15.1	m	m	12.6
Cuba	m	m	12.3	12.6
Trinidad & Tobago	11.5	m	11.6	11.6
Bolivia	25.3	m	m	11.1
Guyana	14.0	10.4	m	10.0
Japan	m	m	10.4	9.9
Indonesia	8.9	m	m	7.8
Nicaragua	10.4	10.2	m	m

Source: UNESCO, Statistical Yearbook 1998, Table 4.1, World Education Report 1998, 2000, Table 10.

Brazil, Honduras, Hong Kong, Indonesia, Mexico, Panama, Thailand 1995

Venezuela 1994

El Salvador 1984 (Min.Ed. spending only)

Guatemala 1979, 1984

Bolivia, Colombia, Guatemala, Paraguay (Min.Ed. spending only)

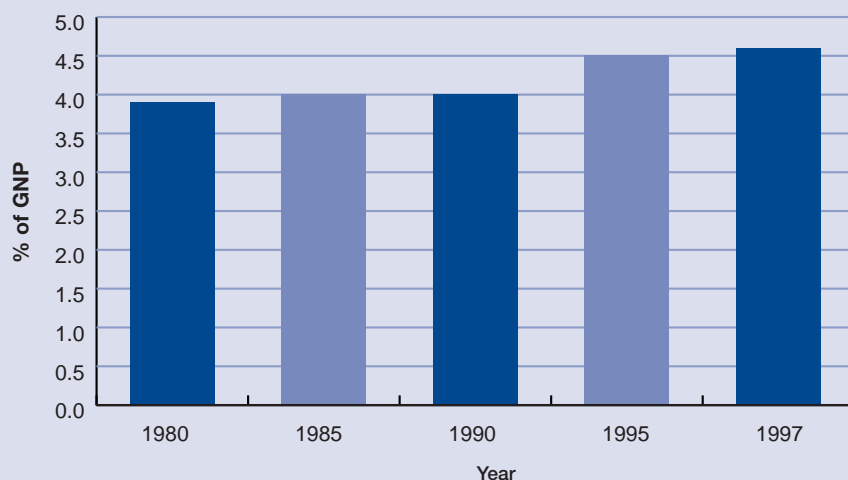
Trinidad & Tobago does not include tertiary spending

Uruguay includes private spending



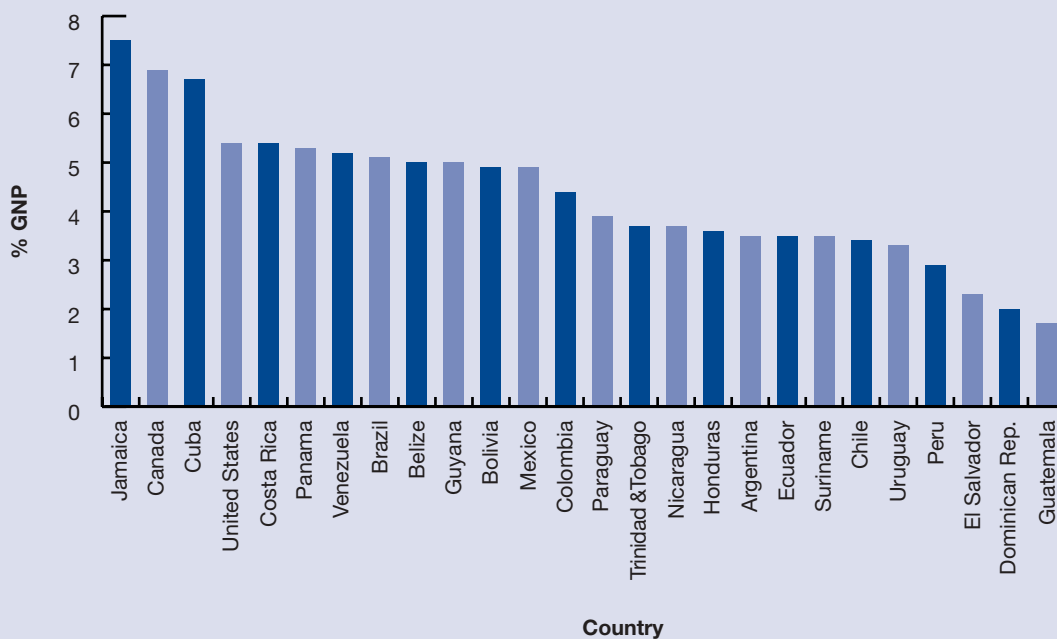
## FINANCE

**Figure A.2 - Public Expenditure on Education in Latin America as a Percent of GNP, 1980- 1997**



Source: UNESCO, World Education Report, 2000.

**Figure A.3 - Public Expenditure on Education as a Percent of GNP, by Country, 1996**



Source: UNESCO, Statistical Yearbook, 1998, 1999.

# TASK FORCE ON EDUCATION, EQUITY AND ECONOMIC COMPETITIVENESS

## CO-CHAIRS

### José Octavio Bordón

(Argentina) is education minister for the Province of Buenos Aires and a member of the Inter-American Dialogue. He was president of the Andean Foundation and served as governor of the province of Mendoza, Argentina from 1987 to 1991. Bordón has also served in the senate, where he chaired the foreign relations committee. He is a former president of the Peronist Party and has been a visiting professor at Georgetown University.

### John Petty

(United States) is currently chairman of Tecsec and is a member of the Inter-American Dialogue. He was former chairman of Federal National Services. He was also chairman and chief executive officer of Marine Midland Bank. Petty served as U.S. assistant secretary of the Treasury for International Affairs and chairman of the High Level Review Committee of the Inter-American Development Bank.

## MEMBERS

### Patricio Aylwin Azócar

(Chile) is president of Corporación Justicia y Democracia. He is a former President of Chile (1990-1994) and is one of the founders of the Christian Democratic party. A distinguished lawyer, academic, and politician, Aylwin served as the head of the Chilean delegation to the United Nations General Assembly in 1969 and was elected president of the Senate in 1971.

### Roberto Baquerizo

(Ecuador) is managing director for Latin America at Pro Ventures. He is also a member of the Chairman's International Advisory Council of the Americas Society and the Inter-American Dialogue. He is former president of Banco Unión S.A. and of Multiplica Consulting Company of Economic Studies, based in Quito. Baquerizo served as president of Fruit Shippers-Pacific Fruit in New York until 1996 and, prior to that, was head of the Central Bank of Ecuador.

### Nancy Birdsall

(United States) is senior associate at Carnegie Endowment for International Peace in Washington, D.C. She is former executive vice president of the Inter-American Development Bank. Birdsall has held various policy and management positions at the World Bank including director of the Policy Research Department and chief of social program operations in Brazil. Her most recent work is on the relationship between income distribution and growth.

### Margaret Catley-Carlson

(Canada) is an independent consultant and a member of the Inter-American Dialogue. She is vice-chair at the Canadian International Development Research Centre in Ottawa. Catley-Carlson is also a member of the boards of directors and advisory committees at various international public and private groups including Global Asset Management, UN Secretary General's Advisory Board, Staff College in New York, and the Turin Advisory Council at St. George's University in Grenada. She is a former president of the Population Council.

### Juan E. Cintrón

(Mexico) is president of Consultores Internacionales CLB, Fundación Comunidad A.C., and the Instituto Cultural y Educativo de Cuernavaca. He serves on the boards of numerous corporations and academic institutions in the United States and Mexico, including Grupo Modelo and the International Advisory Council of the University of Notre Dame, Indiana. Cintrón is former president of the Mexican chapter of the World Presidents Organization and of Junior Achievement-Mexico, where he currently serves as vice chairman. He is also president of the board of trustees of the Monterrey Institute of Technology in Cuernavaca.

### Jonathan Coles Ward

(Venezuela) is director of Instituto de Estudios Superiores de Administración (IESA). He belongs to the Inter-American Management Education Foundation, the International Agribusiness Management Association, Inter-American Dialogue, and the Yale Club of New York. He served as minister of agriculture of Venezuela, as presidential commissioner for emergency food supply and distribution, and as director of the Central Bank of Venezuela.

**José María Dagnino Pastore**

(Argentina) is president of Consultores y Emprendimientos and a member of the Inter-American Dialogue. He was professor of economics at the Catholic University of Argentina and served as minister of finance, minister of economy and labor, and ambassador-at-large in Europe. Dagnino Pastore has also served as an advisor to the governments of four Latin American countries and has authored numerous books and articles on economics and finance. He served as governor of the International Monetary Fund, the World Bank, and the Inter-American Development Bank and chairman of the IMF Annual Meeting in 1969.

**Nancy Englander**

(United States) is senior vice president of Capitol International, Inc. in Los Angeles, California and president and director of the Emerging Markets Growth Fund, an equity fund with substantial investments in Latin America. Englander is chairman of the board and a trustee of New World Investment Fund as well as director of a number of capital funds investing in Latin America.

**Peter Hakim**

(United States) is president of the Inter-American Dialogue, the leading U.S. center for policy analysis and exchange on Western Hemisphere affairs. Hakim authors a regular column for the *Christian Science Monitor* and speaks and publishes widely on U.S.-Latin American relations. He serves on boards and advisory committees for the World Bank, Inter-American Development Bank, International Center for Research on Women, Carnegie Endowment for International Peace, and Human Rights Watch/Americas.

**Ivan Head**

(Canada) is professor of law and director of the Liu Centre for International Studies at the University of British Columbia. He is an officer of the Order of Canada and a federal queen's counsel as well as a past president of the International Development Research Centre of Canada. Head was special assistant to the prime minister for foreign policy issues from 1968 to 1978.

**Rudolf Hommes**

(Colombia) is partner at Violy, Byorum & Parters, LLC and a director of the Colombian business journal *Estrategia*. He has served as minister of finance, director of public credit, and advisor to the monetary board of Colombia; as chairman of the Development Committee at the World Bank; and as president of the Group of Twenty-Four. Hommes was also rector of the University of the Andes in Bogota.

**Enrique Iglesias**

(Uruguay) is president of the Inter-American Development Bank. He has served as minister of external relations in Uruguay, executive secretary of the UN Economic Commission for Latin America and the Caribbean (ECLAC), and president of Uruguay's Central Bank, among a number of other prestigious positions. Iglesias has published extensively and been awarded honorary degrees from several universities. He is a member of the Inter-American Dialogue.

**Emerson Kapaz**

(Brazil) is a member of Congress from the Partido Popular Socialista. He was chairman of the board of Elka Plásticos Ltd., a major toy manufacturer, and former president of the Brazilian Association of Toy Manufacturers and the Pensamento Nacional das Bases Empresariais (PNBE), an organization of Brazilian businessmen. Kapaz has also served as president of the administrative board of ABRINQ Foundation—which defends children's rights—and on the board of directors of the International Council of Toy Industries.

**Jacqueline Malagón**

(Dominican Republic) is director of Fundación Ventura. She was executive director of Action for Education and Culture (APEC), a non-governmental organization working to promote education reform in the Dominican Republic. Malagón has served as minister of education, as representative to the United Nations International Research and Training Institute for the Advancement of Women (INSTRAW), and as director of the non-governmental organization EDUCA.

**José Mindlin**

(Brazil) is the founder of Metal Leve, S.A., a leading Brazilian manufacturing company. He serves as vice president of the Federation of Industries of the State of São Paulo and is a member of the National Council of Scientific and Technological Development. He is chairman of the Advisory Board of the *Estado de São Paulo*, one of Brazil's leading newspapers. Mindlin is also an honorary member of the International Council of the Museum of Modern Art in New York.

**Roberto Murray Meza**

(El Salvador) is president of the AGRISAL Group and director of many private firms. He is a member of the Inter-American Dialogue and the President's Advisory Council of the Americas Society. Murray Meza is a former member of the Commission for Central American Reconstruction and Development (the "Sanford Commission").

**José Angel Pescador**

(Mexico) is academic vice president of the Universidad Iberoamericana. He was assistant secretary for Population and Migrant Services and consul general in Los Angeles. He is also a former secretary of education.

**Manuel Fernando Sotomayor**

(Peru) is president of Productos Pesqueros Peruanos, S.A., one of Peru's largest fish-processing corporations. He is president and founding member of Peru 2021, a business organization that promotes sustainable development projects, second vice president of the National Confederation of Private Business Institutions (CONFIEP), vice president of the Peru-Japan Business Council, and past president of the national Fisheries Society and the Fishmeal Exporters Organization. He is a member of the Group of 50.

**Osvaldo Sunkel**

(Chile) is president of the Corporation for Development Research (CINDE), senior fellow of the Center for the Analysis of Public Policies at the University of Chile, special advisor to the UN Economic Commission for Latin America and the Caribbean (ECLAC), and director of the magazine *Pensamiento Iberoamericano*. He is a member of the Academy of Social Sciences of the Chile Institute and of the Colombian Academy of Economic Sciences.

**Juan Carlos Tedesco**

(Argentina) is director of the International Institute for Educational Planning's (IIEP) regional office in Buenos Aires. He served as director of the Regional Center for Higher Education for Latin America and the Caribbean (CRESALC), the Regional Office of Education for Latin America and the Caribbean (OREALC), and director of UNESCO's International Office of Education in Geneva, Switzerland. Tedesco has published a number of articles and books on education and society and is a member of the National Academy of Education in Argentina, the National Institute for Quality Education (INCE) in Spain, and the Academic Council at the University of Geneva, Switzerland.

**Celina Vargas do Amaral Peixoto**

(Brazil) is director of Serviço de Apoio as Pequenas e Médias Empresas no Estado de Rio de Janeiro (SEBRAE) and a member of the Brazilian State Reform Council, the Commission on Global Governance, and several national commissions on cultural, historical, and technological issues. Vargas do Amaral Peixoto served as director of Brazil's national archives from 1980 to 1990 and has written extensively on Brazilian political and social history.

**Alexandra Vela**

(Ecuador) is a member of Congress. She is former vice president of Ecuador (1997-98).

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BOOKS

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**Avaliação e Determinação de Padrões na Educação Latino-Americana**, with Fundação Getulio Vargas.

**Evaluación y Reforma Educativa**, with the Academy for Educational Development (AED) and the U.S. Agency for International Development (AID).

**Comunidades Educativas Donde Termina el Asfalto: Escuelas Fe y Alegría en América Latina**, with the Centro de Investigaciones (CIDE) and the Academy for Educational Development (AED).

**La Educación y la Reforma de la Educación en Cinco Países Centroamericanos**, with the Universidad Centroamericana and the Ford Foundation.





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Internet: [www.preal.org](http://www.preal.org)



**Inter-American Dialogue**

1211 Connecticut Ave., NW, Suite 510

Washington, D.C. 20036 USA

Tel: (202) 822-9002

Fax: (202) 822-9553

E-mail: [iad@thedialogue.org](mailto:iad@thedialogue.org)

Internet: [www.thedialogue.org](http://www.thedialogue.org) & [www.preal.org](http://www.preal.org)



**Corporation for Development Research**

Santa Magdalena 75, Piso 10, Oficina 1002

Santiago, Chile

Tel: (56-2) 334-4302

Fax: (56-2) 334-4303

E-mail: [infopreal@preal.org](mailto:infopreal@preal.org)

Internet: [www.preal.org](http://www.preal.org)

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